

# ANNUAL REPORT

OF THE



# Department of Health

Year ended 31st December, 1952

Including Statistical Tables for Period 1st July, 1947, to 31st December, 1952



Published by Authority

Price 11s.9d.





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SCALINGTON IN COMPANY

# ANNUAL REPORT 1952

# UNION DEPARTMENT OF HEALTH.

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# TROUBLE LAUWWA

PERMITE TO LINKTERSON WIGHT

STORE

THE HONOURABLE THE MINISTER OF HEALTH.

SIR,

I have the honour to submit, for your information, the following report on the work of the Department of Health for the year ended 31st December, 1952.

#### (I) INTRODUCTION.

In the Union of South Africa, with its many racial components, differing widely in levels of development, culture, tradition and belief, the problem of the health and welfare of the people has in recent years been intensified by an unprecedented industrial revolution with a resultant flow of population from the rural to the urban areas. This is well indicated in the following Demographical Table:—

#### (1) Population in Census Year 1951.—

Europeans... 2,643,187 = 20.9 per cent. of total. Asiatics.... 365,524 = 2.9 per cent. ot total. 1,102,323 = 8.7 per cent. of total. 8,535,341 = 67.5 per cent. ot total. ALL RACES.. 12,646,375

# (2) Percentage of Population Enumerated in Urban Areas—

	1936.	1951.	Increase.
Europeans	65·2 66·2 53·9 17·3 31·4	74·7 75·7 60·8 23·6 39·0	$\begin{array}{c} 9.5 \pm 251,000. \\ 9.5 \pm 34,720. \\ 6.9 \pm 76,020. \\ 6.3 \pm 537,600. \\ 7.6 \pm 960,000. \end{array}$

The expenditure incurred by the Department for the year 1941 amounted to £904,127. During the year 1943 the control of Mental Hospitals and Institutions for the Feebleminded was transferred to the Department. The total expenditure on all services amounted to £7,786,561 for the financial year ended 31st March, 1953. The largest portion of this increase was concerned with the conduct of Mental Hospitals, Institutions for the Feebleminded, as well as of those suffering from tuberculosis, leprosy and venereal disease. In this connection it is interesting to note that accommodation is provided in these institutions to-day for nearly 21,000 patients, 8,618 Europeans and 12,371 Non-Europeans, whilst the personnel approximates 6,300.

On the 1st April, 1952, a Department of Nutrition was formed whose main function is to raise the nutritional standard of the population generally. The staff of the Division of Nutrition, which formerly formed a portion of the Department of Health, was absorbed by the

Department of Nutrition.

For purposes of administration the Union has been divided into six areas each controlled by a Deputy Chief Health Officer. Regional offices are responsible for all activities in their areas which include, the administration of the Public Health Act and Regulations as well as the Food, Drugs and Disinfectants Act and the Medical, Dental and Pharmacy Act. To prevent overlapping of services, health centre services and district surgeoncies have been placed under the direction of the Regional Deputy Chief Health Officers.

The vital statistics in respect of Europeans for the year 1952 contain several interesting features, the most notable being that the infant mortality rate is lower than any previously recorded for the Union. The maternal mortality rate has also steadily declined although the figure for 1951 shows a slight increase over the 1950 figure. The actual or crude death rate compares favourably with previous years and the

tuberculosis death rate is slightly lower than in any previous year. On the other hand the death rate from cancer is the second highest figure recorded since 1920 and that for diseases of the heart and circulatory system is the third higest.

On the 1st July, 1952, the compulsory registration of births and deaths for the Bantu resident in rural areas was introduced by the Department of the Interior.

Leprosy, plague, smallpox, typhus and malaria, which, in the past caused the department grave concern have now become of secondary importance due to the application of improved therapeutic and control measures. The introduction of sulphones has revolutionized the treatment of leprosy, and DDT and BHC have simplified field work in combating typhus, plague and malaria. Insufficient progress has been made, however, in lowering the incidence of diphtheria and typhoid fever, in spite of the fact that the prevention of both these diseases can be effected by known public health measures.

Although the incidence of tuberculosis remains high, especially among the non-Europeans, the outlook for the future has improved considerably. Due to an increased public awareness of the magnitude of the problem, which has expressed itself in generous support of the S.A. National Tuberculosis Association and improved methods of treatment resulting in shorter periods of hospitalization, effective tuberculosis control has become a practical possibility.

A conference on tuberculosis was held in Durban during November, 1952, and was attended by Deputy Chief Health Officers, Departmental Tuberculosis Officers, full-time Medical Officers of Health and visitors from overseas. Several Medical Officers from neighbouring territories were also present. The object of the conference was to discuss what part B.C.G. vaccination should play in combating tuberculosis.

During the period under review the Department was obliged to carry on without its full complement of professional staff, notwithstanding the natural expansion of services. This position is one of grave concern.

Dr. G. W. Gale who joined the Department as a medical inspector in 1939 was appointed Secretary for Health and Chief Health Officer in 1946, resigned from this post as from the 1st March, 1952 to undertake the development of the newly formed Medical School in Durban in the capacity of Dean.

# (II) 1.—DEPARTMENT OF HEALTH AS AT 31st DECEMBER, 1952.

Minister of Health: Dr. The Hon. K. Bremer. Secretary and Chief Health Officer: Dr. J. J. du Pré le Roux.

Under-Secretary: N. A. G. Reeler, Esq. Assistant Secretary: S. C. Schoeman, Esq. Departmental Chief Clerk: H. J. Adams, Esq.

#### Head Office.

Commissioner for Mental Hygiene: Dr. I. R. Vermooten.

Deputy Chief Health Officers: Dr. B. M. Clark and Dr. R. J. Smit.

Chief: Division of Venereal Diseases: Dr. H. F. Schiller.

Total Number	Fort Napier Hospital, Pietermaritzburg: Physician
Professional	Superintendent, Dr. D. J. Rossouw. Komani Hospital, Queenstown: Physician Superinten-
Administrative	dent, Dr. K. B. Wright. Kowie Hospital, Port Alfred: Physician Superintendent,
Other Europeans	Dr. C. A. D. Heese.
Non-Europeans	Umgeni Waterfall Institution, Howick: Physician Super- intendent, Dr. P. C. W. Deppe.
Regional Offices.	Oranje Hospital, Bloemfontein: Physician Superintendent, Dr. D. S. Huskisson.
(Including Pathological Laboratories and Port Health Staff).	Sterkfontein Hospital, Krugersdorp: Physician Super- intendent, Dr. L. A. Hurst.
Tzaneen Deputy Chief Health Officer: Dr. D. H. S. Annecke.	Tower Hospital, Fort Beaufort: Physician Superintendent, Dr. J. J. G. de Kock.
Cape Town Deputy Chief Health Officer: Dr. P. C.	Town Hill Hospital, Pietermaritzburg: Physician Super-
Eagle. Senior Pathologist: Dr. R. Turner.	intendent: Dr. T. E. Cheze-Brown. Valkenberg Hospital, Observatory: Physician Super-
Port Health Officer: Dr. J. M. Bosman.	intendent, Dr. G. J. Key.
Port Health Officer (P.E.): Dr. D. B. Gosling.	Witrand Institution, Potchefstroom: Physician Super- intendent, Dr. B. P. Pienaar.
Durban Deputy Chief Health Officer: Dr. A. L.	Total Number
Ferguson. Senior Pathologist: Dr. I. Gordon.	Professional and technical 85
Port Health Officer: Dr. N. Miller.	Administrative9
East London Deputy Chief Health Officer: Dr. W. A. Smit.	Clerical
Bloemfontein Deputy Chief Health Officer: Dr. C. J. H. Brink.	Other posts (European)
Johannesburg Deputy Chief Health Officer: Dr.	Posts (non-European)
C. A. M. Murray.  Medico Legal Pathologist: Prof. R. H.	Leper Institutions.
Mackintosh.	Westfort Institution, Pretoria: Medical Superintendent, Dr. A. R. Davison.
Ecologist and Chief Rodent Officer: Mr. D. H. S. Davis.	Mjanyana Institution, Transkei: Medical Superinten-
Total Number	tendent, Dr. P. A. Thornton.  Amatikulu Institution, Zululand: Superintendent,
Professional and technical 157	Mr. I. G. C. Scotney.
Administrative	Mkambati Institution, Pondoland: Superintendent, Mr. J. P. J. Kolver.
Clerical	Bochum Institution, Pietersburg (Transvaal): Superintendent, Mr. J. H. G. Franz.
Non-Europeans	Total Number
2.—Departmental Institutions.	Professional and technical
Tuberculosis Services.	Administrative
King George V-Hospital, Durban: Medical Super- intendent, Dr. B. A. Dormer.	Nursing (European)
Nelspoort Sanatorium, Restvale: Medical Superinten-	Other posts (European)
dent, Dr. T. W. Randall.  Rietfontein, Johannesburg: Medical Superintendent,	Temporary
Dr. J. H. Loots.	Venereal Diseases Hospitals.
Westlake Hospital, Retreat, Cape Town: Medical Superintendent, Dr. P. Scher.	Rietfontein Hospital, Johannesburg: Medical Super- intendent, Dr. J. H. Loots.

Superintendent, Dr. J. H. Loots. and several smaller hospitals at King William's Town,

Vryburg and Zeerust.

#### 3.—HEALTH CENTRE SERVICES.

Institute of Family and Community Health, Durban. Medical Officer-in-Charge, Dr. S. L. Kark.—The following 30 Health Centres were in operation in the different provinces on 31st December, 1952 (at each centre it is indicated which section of the community is

		European.	Non- European	
1.	Adelaide	x	x	
2.	Cradock	111111	X	
3.	Fort Beaufort	X	x	
4.	George	X	x	
5.	Gordonia		x	
6.	Grahamstown		X	
7.	Grassy Park (Cape Town)		x	
8.	Knysna	x	x	
9.	Mossel Bay	x	x	
10.	Sandflats (Alexandria)	x	x	
11.	Stellenbosch	X	x	
12.	Umtata		x	
13.	Walmer (Port Elizabeth)	X	x	
14.	Zwelitsha (King William's Town)		x	

intendent, Dr. F. Bakker. Total Number of Posts. Professional and technical..... 139 Administrative..... 6 Clerical.... 38 Nursing (European)..... 291 Other posts (European)..... 145 Posts (non-European)..... 1,233 Temporary..... 30

West End Hospital, Kimberley: Medical Superintendent,

Tembuland Hospital, Umtata: Medical Superintendent,

Durban Chest Clinic: Medical Officer-in-Charge, Dr. G. S. Pirrie.

Nama Hospital, Springbok: Part-time Medical Super-

Mental Hospitals and Institutions for the Feebleminded.

Weskoppies Hospital, Pretoria: Physican Superintendent and Deputy Commissioner for Mental Hygiene, Dr. W. H. Myburgh.

Dr. C. A. Sleggs.

Dr. F. J. Wiles.

Alexandra Institution, Cape Town; Physican Superintendent, Dr. M. Ginsberg.

Fort England Hospital, Grahamstown: Physician Superintendent, Dr. M. M. Cohen.

#### 4.—DISTRICT SURGEONCIES AS AT DATES SHOWN.

				DISTRICT SURG	LONGIA	AD AT L	AILS SIL	OWN.
	European.	Non- European.				Part-	time.	
1. Botha's Hill		X X X X	Date.	Province.	Whole- time.	On Inclusive Salary.	On Annual Salary with Certain Fees and Allo- wances.	total.
6. Polela (Bulwer) 7. Springfield (Durban) 8. Tongaat 9. Clairwood (Durban)	X	X X X X	30/6/48	Cape	12 4 25 2 2	<u>-</u> 1 -	182 46 82 63	194 50 108 65 2
TRANSVAAL.				Union	45	1	373	419
	European.	Non- European.	30/6/49	Cape	11 4 26 3 2	- 1 -	183 46 83 65	194 50 110 68 2
				Union	46	1	377	424
<ol> <li>Bloemhof</li></ol>		X X X X	30/6/50	Cape	11 4 24 3 2	<u> </u>	183 46 83 65	194 50 108 68 2
6. Witrivier	х	х		Union	44	1	377	422
ORANGE FREE STA	ATE.		30/6/51	Cape	12 5 30 3	<u></u>	183 46 84 66	195 51 115 69 2
	European.	Non- European.		Union	52	1	379	432
1. Bethlehem		х	31/12/51.	Cape	12 5 31 3	  	184 46 82 66	196 51 114 69
		umber of sts.		Union	53	1	378	432
Professional and Technical.  Administrative.  Clerical.  Nursing (European).  Other Posts (European).	. 7 . 4	1 1 17 3 8	31/12/52 <b>.</b>	Cape	13 5 35 3 2	_ _ _ _	186 47 82 67 —	199 52 118 70 2
Posts (non-European)		3		Union	58	1	382	441

#### UNION OF SOUTH AFRICA.

#### 2.—Census 1951.—Preliminary Figures.—Deputy Chief Health Officers' Areas.

Area.	Euror	PEANS.	Asia	rics.	Colou	JRED.	NAT	TIVE.	Total.
7 1104.	M.	F.	M.	F.	м.	F.	M.	F.	1 otur.
Cape Region Cape Eastern Region Natal Region Orange Free State, and North	354,017 74,336 136,476	359,903 77,172 137,992	7,842 1,147 153,175	5,897 993 145,893	442,295 28,040 15,353	443,135 27,972 16,197	198,939 820,329 875,155	142,737 1,081,362 928,192	1,954,765 2,111,351 2,408,433
West Cape Transvaal Northern Region Transvaal Southern Region	151,621 50,095 557,289	146,212 47,007 551,067	922 1,888 23,982	763 1,687 21,335	27,490 1,834 35,836	26,426 1,500 36,245	520,369 524,081 1,418,232	495,618 594,514 935,813	1,369,421 1,222,606 3,579,799
Total	1,323,834	1,319,353	188,956	176,568	550,848	551,475	4,357,105	4,178,236	12,646,375

#### III.—REGIONAL OFFICES.

In order to exercise direct control over its various functions, the Department of Health embarked on a policy of decentralisation. The Union was divided into six regions each under the control of a Deputy Chief Health Officer, who is responsible for the activities of the Department in his region. Until 1952, however, a considerable measure of direct control was exercised by Head Office over certain important field activities—namely District Surgeon and Health Centre Services. In 1952, it was decided to place these activities under the control of the Regions. It is hoped in this way to achieve a better integration of services in the field.

#### 3.—The six regions are as follows:—

#### (1) Cape Region, Deputy Chief Health Officer Cape Town—

Aberdeen.
Beaufort West.
Bellville.
Bredasdorp.
Britstown.
Caledon.
Calitzdorp.
Calvinia.
Cape Town.
Carnarvon.

Mossel Bay.
Murraysburg.
Namaqualand.
Oudtshoorn.
Paarl.
Pearston.
Philipstown.
Piquetberg.
Port Elizabeth.
Prieska.

Prince Albert. Ceres. Richmond. Clanwilliam. Cradock. Riversdale. Robertson. De Aar. Fraserburg. Simonstown. Graaff-Reinet. Somerset East. Somerset West. George. Stellenbosch. Gordonia. Steytlerville. Hanover. Heidelberg. Sutherland. Hopefield. Swellendam. Hope Town. Tulbagh. Humansdorp. Uitenhage. Jansenville. Uniondale. Kenhardt. Van Rhynsdorp. Victoria West. Knysna. Ladismith. Wellington. Laingsburg. Williston. Willowmore. Malmesbury. Middelburg. Worcester.

(2) Cape Eastern Region, Officer, East London—

Montagu.

Deputy Chief Health

Adelaide.
Albany.
Albert.
Alexandria.
Aliwal North.

Keiskamahoek. Kentani. King William's Town.

Wynberg.

Komga.

Aliwal North.
Barkly East.
Bathurst.
Bedford.
Bizana.
Butterworth.
Cathcart.
Colesberg.
East London.
Elliot.

Elliotdale.

Encgobo. Flagstaff.

Fort Beaufort.

Lady Grey.
Libode.
Lusikisiki.
Maclear.
Maraisburg.
Matatiele.
Middledrift.
Molteno.
Mount Ayliff.
Mount Currie.
Mount Fletcher.
Mount Frere.
Mqanduli.
Ngqeleni.

Glen Grey.
Herschel.
Idutywa.
Indwe.
Qumbu.
St. Marks.
Sterkstroom.
Steynsburg.
Stockenstrom.
Stutterheim.

Tabankulu.

Nqamakwe.
Peddie.
Port St. Johns.
Queenstown.
Tsomo.
Umtata.
Umzimkulu.
Venterstad.
Victoria East.
Willowvale.
Wodehouse.
Xalanga.

Tsolo.

Tarka.

(3) Natal Region, Deputy Chief Health Officer, Durban—

Natal Province.

(4) Orange Free State, and North West Cape, Deputy Chief Health Officer, Bloemfontein.—Orange Free State Province and the following districts in the Cape Province:—

Barkly West. Mafeking.
Hay. Postmasburg.
Herbert. Taungs.
Kimberley. Vryburg.
Kuruman. Warrenton.

(5) Transvaal Northern Region, Deputy Chief Health Officer, Tazneen—

Barberton.
Belfast.
Carolina.
Groblersdal.
Letaba.
Lydenburg.
Middelburg.

Nelspruit.
Pilgrimsrest.
Pietersburg.
Potgietersrust.
Waterberg.
Zoutpansberg.

(6) Transvaal Southern Region, Deputy Chief Health Officer, Johannesburg—

Amersfoort.
Benoni.
Bethal.
Bloemhof.
Boksburg.
Brakpan.
Brits
Bronkhorstspruit

Marico.
Nigel.
Piet Retief.
Potchefstroom.
Pretoria.
Roodepoort.
Rustenburg.
Schweizer Panek

Bronkhorstspruit. Schweizer Reneke. Christiana. Springs. Ermelo. Standerton. Germiston. Ventersdorp. Heidelberg. Vereeniging. Johannesburg. Volksrust. Klerksdorp. Wakkerstroom. Krugersdorp. Witbank. Lichtenburg. Wolmaransstad.

4.—The following functions are common to all Regions:—

(1) Control of infectious diseases.

(2) Control of vector borne diseases: Plague, typhus, rabies, malaria, bilharzia, relapsing fever.

(3) Venereal Disease Control.

(4) District surgeons.(5) Health centres.

(6) Maternity and child care.(7) Statutory inspection services:—

Statutory Services—

(a) Public Health Act.(b) Food and Drugs Act.

(c) Medical, Dental and Pharmacy Act.

Inspection Services—
Environmental hygiene.
Industrial hygiene.

(8) Health Education.

(9) Pathological Laboratories (Cape and Natal Regions).

(10) Port Health (Cape, Natal Regions and Eastern Cape Regions).

5.—In addition to the above functions, the following are of special importance in each Region:—

(1) Natal.—Malaria, amoebiasis, airport control.

(2) Orange Free State.—Control of newly developing gold fields in respect of plague, environmental and industrial hygiene.

(3) Cape Eastern.—Health services in Native Reserves: Typhus and Plague Control.

(4) Cape.—Port health, laboratories and biological control. Production of smallpox vaccine and control of therapeutic substances.

(5) Northern Transvaal.—Malaria, bilharzia.

(6) Southern Transvaal.—Industrial hygiene and airport control.

Details of work done and statistics compiled by the various regions are included in the relevant sections of this report.

#### (IV) EPIDEMIOLOGY.

The continued success in reducing the incidence of smallpox by means of large scale vaccination and dealing effectively with such vector-borne diseases, as typhus and plague by means of insecticides, has reduced their significance to the application of routine measures.

In the case of tuberculosis, much progress has been made in the fields of prevention, isolation and treatment.

#### 1.—BILHARZIA.

The Department has been much exercised about the problem of bilharzia for some years. This disease has assumed much greater importance as a public health problem owing to the very rapid and widespread agricultural development which has taken place in the sub-tropical parts of the Union in recent years, made possible by the control of malaria in those areas. This applies especially to the lowveld of the Northern and Eastern Transvaal. Much of this agricultural development, such as the growing of rice, has taken place under irrigation and the irrigation dams, canals and lands afford increased opportunities for the breeding of the snail vectors of the disease and for its spread to the human population working in the area with the result that the disease is assuming increasing proportions.

Careful consideration has been given to the problem for several years and the Department's field staff falling under the Deputy Chief Health Officer stationed at Tzaneen has been carrying out extensive field investigations for some time with a view to ascertaining the best means of combating the disease. In carrying out this work it has been necessary to ensure that it was done without any interference with the development of fish life in the streams and after discussions with the Transvaal Provincial Administration a satisfactory liaison was established between the Flora and Fauna Division of that Administration and this Department with this object in view. The field investigations have been continued and steps are being taken to develop the organisation of the Department in the Transvaal so as to extend the control measures which have hitherto been exercised only on an experimental basis.

There is, however, much that remains unknown or uncertain about the snail vectors and the possibilities of control of the disease. Accordingly about three years ago the Department invited Dr. Barlow, an expert who had been working for a long time on bilharzia in Egypt, to visit the Union to advise the Department on the matter. After a thorough survey of the position Dr. Barlow strongly advised that a malacologist should be appointed to undertake long range research into the subject. The post was accordingly created and the Department is taking the necessary steps to fill it in order to ensure that the most suitable and effective steps are taken to combat the disease.

In the meantime research work has not stood still. In addition to the Departmental field work, previously mentioned, the countil for Scientific and Industrial Research has a "Bilharzia and Tropical Diseases Committee", on which the Department is represented and responsible to this Committee is a very active "Bilharzia Natural History Unit" working on the problem at the South African Institute for Medical Research and having contacts in the field with the Department's workers.

The Department is also represented on the Transvaal Bilharzia Committee and provides half the cost of the services rendered by that Committee. These include treatment by the committee's mobile unit, of children at bilharzia camps during school holidays by a full-time medical officer as well as financial assistance to schools in the bilharzia areas which wish to provide swimming baths as a means of keeping the children out of infected rivers and so avoiding exposure to the disease.

#### 2.—DIPHTHERIA.

Statistics: Table II (1), page 49.

In spite of repeated warnings by the Department and the various local authorities this readily preventable

disease shows no signs of decreasing.

In the report of the Ministry of Health of the United Kingdom (1951) the statement is made that "unless the proportion of the population immunised is kept up to the 70 per cent. level, the prevention of epidemic diphtheria cannot be reasonably assured". In the Union at present no returns are submitted by the local authorities of the number of immunisations performed, but it can safely be assumed that the percentage population immunised is far below 70, even in the case of European children in urban areas. This means that the population is continually being exposed to the risk of epidemics.

Although there are several local authorities who are concerned about the incidence of diptheria in their areas, and who are by means of active propaganda and immunisation clinics doing their best to improve the situation, no significant improvement can be expected until this problem is attacked on a nation-wide scale.

#### 3.—LEPROSY.

Statistics: Table II (2), page 54.

There has been no change in the policy of segregating every case of active leprosy until clinical and bacteriological investigations have shown the patient to be of no danger to the general public. The disease in the neural (new term tuberculoid) form, is usually rapidly arrested and such cases are mostly discharged within twelve months of admission to an institution. Where, however, bacilli are discovered, as sometimes happens in the tuberculoid form, and is invariably the case in the lepromatous form, the precautions are much more stringent. No case in which bacilli has been demonstrated is discharged until skin and nasal tests have been negative for twelve consecutive months. As a further precaution, such cases are required to take treatment for a prolonged period after discharge. Lepromatous cases are also obliged to return to the institution for periodic re-examination for a period of six years after discharge. These precautions may at first sight appear unduly exacting but they are the only means by which the general public can be assured that the discharged cases are really non-infective and more important still, the patient is assured that if a relapse did occur it would be speedily detected and brought under treatment.

The policy of maintaining five institutions in various parts of the country has been continued. Thus patients are treated in institutions close to their relations and friends where thay can be visited frequently. Relatives are provided with free rail or bus warrants for this purpose and are housed and fed at Government expense while visiting the institutions.

Churches and schools are provided for the inmates, who are also remunerated for work done. Where necessary, maintenance grants are given to needy relatives.

The administration of sulphones has become the basis of treatment in all types of the disease. The external lesions respond rapidly but the elimination of all bacilli in advanced cases is slow. This is the general finding throughout the world and in an endeavour to expedite the elimination of bacilli, the Leonard Wood Memorial for the Eradication of Leprosy (Washington D.C.) arranged for parallel controlled experiments in Japan, in the Philippines and in South Africa. The Senior Leprosy Officer of the Union proceeded to Japan, the Phillipines and the United States of America as a guest of Leonard Wood Memorial Leprosy Relief Association with the investigation being sponsored by this organisation.

The drugs tried out were sulphones, streptomycin, and P.A.S. either alone or in various combinations. Beneficial effects were obtained in all groups but the speedy cure has not yet been achieved. Further controlled experiments are planned by the Leonard Wood Memorial.

These new medicaments have greatly reduced morbidity and mortality in those suffering from leprosy. At the Westfort Institution the average number of deaths in the five years preceding the sulphones was 99 per annum. In 1952 the number of deaths was 26. The discharge rates have been steadily increasing and at the Mkambati Institution no less than 73 per cent. of the patient population was recommended for discharge in 1952. Since 1924 more than 12,000 patients have been discharged from the various institutions. The number remaining at the five institutions in December, 1952, was 2,072.

The reduction in the number of patients in the institutions will make it possible to set aside half the accommodation, in three of the institutions serving the Native Reserves, for the admission of patients suffering from tuberculosis.

#### 4.—MALARIA.

Statistics: Table II (3), page 56.

(1) Northern Transvaal—Malaria is a seasonal disease which occurs in summer and can consequently only be reported on from July to June. The Department consequently is unable to submit a report in respect of a

calendar year.

Striking results have been achieved by the widespread use of modern malaria control methods, proof of which is given in a statement by the Minister of Health in a radio broadcast in April, 1952. "Between the precipitous escarpment of the Drakensberg mountain range to the west and the flats of Mocambique to the east, and stretching from the Limpopo in the north to the mountains of Swaziland in the south, is 10,000 square miles containing some of the country's richest farming land in the world for sub-tropical fruit; yet only fifteen years ago this area was shunned by Europeans, and those natives who survived to young adult life lay ill in the kraal just when they should have been reaping their crops . . . .

With the almost complete disappearance of malaria, the town of Groblersdal has grown very rapidly and more than 300 families are established where previously there were only a few. In the hyper-endemic zones of Pongola—a few years ago an almost deserted region—the disappearance of malaria gives a fair chance that within five years the area will be producing about 20 per cent. of the sugar cane grown in the Union, and in the frontier zones the Limpopo, 15,000 to 20,000 acres now produce tobacco and groundnuts. In the region of Letaba one of the richest areas in the Union, there are now 12,000 acres of irrigated land, whereas in 1940 there

were only 700".

The year under review (summer, 1951-52) was dry. The rainfall (January-March) at Tzaneen (as an example) was 9.72 inches compared with 14.17 in 1950-51, 22.39 in 1949-50 and 18.59 in 1948-49. The average annual expenditure on malaria control since 1948 has been £152,000. Proof of the success of the investment in adequate malaria control is the increase in revenue to the Government in respect of transfer fees which was £64,681 in 1946-47 and £165,421 in 1951-52.

The relationship between the malaria control staff of the Union Health Department's regional office in the Northern Transvaal and its neighbours, the Bechuanaland Protectorate, Swaziland and Portuguese East Africa remains cordial. Test spraying of huts in these areas was undertaken with the approval of the authorities concerned in order to determine the presence or not of infected vectors.

Anti-malaria measures were undertaken successfully on behalf of Bechuanaland Protectorate in the Tuli Block.

During the course of the year a discussion took place at Komatipoort between representatives of Portuguese East Africa, the South African Railways and the Department of Health, at which the various practical aspects of malaria control were discussed. The combination of D.D.T. and B.H.C. was subject to scrutiny as well as the use of the various types of spray pumps. The discussions were valuable to all those present.

(2) Natal and Zululand.—Malaria control in Natal and Zululand is the responsibility of the Deputy Chief Health Officer at Durban. This area, which had a poor rainfall in 1952, was subjected to drought conditions for practically the entire year, with the result that

mosquito vector breeding was limited.

Breeding was confined to coastal areas from the Umkomaas River in the south to the Pongola in the north and to the catchment areas of the Pongola and Tugela Rivers in the Midland areas of the region.

The incidence of malaria was the lowest ever recorded in Natal, only 35 positive slides having been examined during the year. Of these 13 were European cases of whom four were from outside the Province. The balance of 22 were Bantu.

Routine control measures were undertaken in all the coastal areas north of the Umkomaas: in the Natal sugar belt by Malaria Committees, and in the adjoining Bantu and European areas by Departmental field staff and on the Railway Administration's property by the South African Railways Health Staff.

These measures are now standardised and consist of—

- (1) weekly applications of larvicides on all surface waters;
- (2) application of residual insecticides where larvicides are not applicable;
- (3) check spraying with pyrethrum.

Applications of residual insecticides are governed by

the presence of vectors.

South of the Tugela River and the Midland river valleys one application of insecticides was found to be adequate whereas on the coastal areas of Zululand two applications are necessary during the season. In the hyper-endemic areas of the Pongola Basin east of the Lebombo more active measures are required.

#### 5.—PLAGUE.

Statistics: Table II (4), page 57.

(a) Human Plague.—Three outbreaks of bubonic plague, which gave rise to five cases with three deaths, were reported from the districts of Koppies, Heilbron, Thaba 'Nchu and Port Elizabeth. The details are as follows:—

Out- break.	Date.	Locality.	Cases.	Result.
1	13/2/52	Farm Uitvlught No. 216, adjoining Koppies Station, Koppies District. Contracted on nearby Bellary No. 826, Heilbron District	1 Native	Recovered
2	31/7/52	Farm Strathearn No. 396, 12 miles south of Tweespruit Station, Thaba 'Nchu District	Native	Fatal.
3	27/9/52	Withoogte, portion of farm Brak River, 4 miles south of Uitenhage, Port Elizabeth District	2 Coloured	1 Fatal.
4	27/9/52	Rietkuil, portion of farm Brakwater Flats, 5½ miles south Uitenhage, Port Elizabeth	1	Fatal.

- (b) Plague Epizootics.—(1) The Port Elizabeth outbreak was heralded by an extensive epizootic amongst veld rodents, first discovered on the farm Brampton-Manor near Addo. A specimen of a Bush Karroo Rat (Myotomys unisulcactus) collected there on 4th August, 1952, proved to be plague-infected. Several batches of unidentified Myotomys fleas, one Multimammate mouse (Mastomys coucha) and several more Myotomys subsequently collected from the Uitenhage-Addo-Coega area, the outskirts of Redhouse village, the vicinity of the plague huts and from St. Albans airport were all infected with plague. A vigorous anti-plague campaign was launched by the Divisional Council and the infection did not enter the urban rodent population.
- (2) Three batches of gerbil (*Tatera brantsi*) fleas, collected in August from farms neighbouring the site of the Thaba 'Nchu outbreak, were found to be plague-infected, thus confirming the presence of an epizootic prior to the outbreak in July.

- (3) Two batches of infected gerbil fleas from the Indwe River in Bengu Location No. 1 Glen Grey District, revealed a localised epizootic in that area in August.
- (4) Routine collections of gerbil fleas to the north and south of the town of Lady Grey, Lady Grey District, revealed an active epizootic on two occasions during October.

All four epizootics occurred in old plague areas. Generally speaking plague, both in man and in rodents, remainined at a low level throughout the Union.

- (c) Routine Laboratory Investigations.—Of 867 flea and rodent specimens (excluding routine collections of Johannesburg City rats) submitted from all over the Union for plague examination, only eight were found to be infected with plague. None of 1,143 Johannesburg rats was plague infected.
- (d) Anti-plague Surveys.—The regional surveys of the Union were again carried out during the winter and the data are being analysed.
- (e) Research.—(1) Mastomys Breeding.—The laboratory colony of Mastomys produced an adequate supply of animals for bacteriological tests throughout the year. Some of the animals were used in an investigation of the Mastomys oestrous cycle. Breeding data from the whole colony were used to obtain estimates of population parameters.
- (2) Rodenticides.—Satisfactory laboratory and field tests were carried out with two proprietary brands of the new hydroxy-coumarin anti-coagulant rodenticides. It is now possible to maintain continous control of domestic rodents in almost any premises by anti-coagulant baits in permanently placed "P. 3" (Protected Poison Point) boxes.
- (3) Bacteriological.—Extensive plague immunisation tests were conducted with material prepared from the capsular proteins of pasteurella pestis organisms. A few micrograms of the pure antigen injected into mastomys produce an immunity capable of resisting a challenge of 500 minimal infective doses of virulent plague bacilli, a very severe test. With a single exception, no unpleasant reactions were experienced by a large group of volunteers who were given subcutaneous doses of 25 or 50 micrograms of antigen.

#### 6.—POLIOMYELITIS.

Statistics: Table II (5), page 60.

The number of cases of poliomyelitis notified in South Africa during the ten years ending June, 1944, fluctuated between 18 and 92 cases annually, and this came to be regarded as the normal endemic incidence of the disease in this country in so far as cases are recognised and notified. In the year ended 30th June, 1945, the disease assumed epidemic proportions and 1,380 cases were recorded. The flare-up subsided quite suddenly at the end of January, 1945, and the figure for the year ending June 30th, 1946, was 217, while at the end of the

following year it was only 79.

The latter half of 1947 started with the usual "endemic" number of notifications, but the number began to increase in December of that year when 27 cases were notified, and rose sharply in the following three months to reach a peak of 742 cases in April, 1948. The figure then dropped to 307 cases in May and 81 in June. Altogether 2,073 cases were notified during the period 1st July, 1947 to 30th June, 1948, the highest annual figure yet recorded. The following six months, a lower notification figure was recorded throughout the Union and the number totalled 215 cases by the end of December, 1948. In 1949 there was a further decrease when 414 cases were notified, and in 1950 the notification figure dropped to 161 cases. There was a slight upward tendency in the incidence rate during 1951, when the figure rose to 463 cases and then dropped to 270 in 1952.

It is well known that many cases of poliomyelitis are missed, even during an epidemic, because such a large proportion of cases are non-paralytic and therefore not recognised.

The notifications indicate that there is a much higher rate in Europeans than in non-Europeans, which conflicts with the findings in other infectious diseases, where the poorer classes living in crowded quarters are more susceptible to infection.

It is impossible to determine the paralysis rate of poliomyelitis in the Union, but figures from the Johannesburg Municipal Health Department reveal the following interesting facts:—

During the period 30th June, 1947 to 30th June, 1948, 780 cases of poliomyelitis were recorded of which 637 were Europeans and 143 non-Europeans. Of these 37.57 per cent. were left with residual paralysis or weakness. In the next year 102 cases were recorded; 89 Europeans and 13 non-Europeans and 40 per cent. retained some residual weakness or paralysis.

In the previous epidemic in 1944-45, 201 cases were notified in Johannesburg of which 28 per cent. now retain residual weakness or paralysis.

Of the European cases in the 1947-48 period twenty four ended fatally, while ten non-Europeans died; and in the following year one Native child dried from poliomyelitis, whilst no European deaths were recorded.

In the 1944-45 epidemic there were 26 deaths from poliomyelitis giving a mortality rate, for cases notified, of 13 per cent. This dropped in the 1947-48 epidemic to 4.17 per cent. and in the 1948-49 year to less than one per cent.

Another interesting fact revealed by the information available concerning the 1944-45 and 1947-48 epidemics is that there has been a notable increase in the number of cases recorded in the older age group—15 years and over—in the later epidemic. This trend has also been noticed in other countries. The term "infantile paralysis" is thus a misnomer.

As the standards of hygiene of the non-European are improved, as they are in the model villages being erected in various parts of South Africa, it is possible that there will be an increase in the proportion of paralytic cases seen in the Bantu unless some method of immunization is found. It is gratifying therefore to note that notable progress has been made in the last five years in the culture of poliomyelitis virus in tissue cultures of human and monkey tissues, and that there is promise that a preventive vaccine will be developed. Facilities for tissue culture and for the production of such a vaccine are provided in the new laboratories of the Poliomyelitis Research Foundation, where all facilities for the isolation and typing of poliomyelitis virus, are also available.

Recent studies carried out in these laboratories have revealed that all of the three known types of poliomyelitis virus occur in South Africa.

#### 7.—RABIES.

Statistics: Table II (6), page 65.

The existence of rabies has been recognised in South Africa for over a century. After a period of quiescence for many years, the disease again became prominent some sixty years ago when it appears to have been introduced into the Port Elizabeth district through an imported infected dog. Confirmation of rabies infection by laboratory methods was made in 1928 when any possible doubt about the existence of the disease in the country was finally removed.

Until 1950 rabies occurred mainly in the small wild carnivorous animals of the meercat or mongoose family (viverridae) and also in the wild cats (felidae) through which infection could be transmitted to domestic animals and man.

Towards the latter part of 1950, however, it was realised that cases of dog rabies were occurring in the Northern Transvaal. An area north of a line drawn through Potgietersrust was found to be infected with rabies. Rabid dogs were reported in the Letaba area and at Punda Maria. It became apparent that the dog strain of rabies virus had been introduced into the Union. The introduction of true dog rabies into this country is of serious import.

The Deputy Chief Health Officer, Northern Transvaal, in his 1950-51 report mentions that the first cases of dog rabies in the Transvaal were found in the Limpopo region, from where there was a gradual spread to Sibasa

and the Eastern Transvaal.

These outbreaks have been mainly confined to native areas, making control on the dog population extremely difficult, as the Bantu are loath to have their dogs destroyed unless they show definite signs of illness. The Division of Veterinary Services of the Department of Agriculture has been conducting an extensive campaign in the area in an effort to bring the disease under control, and since 1950 more than 12,000 unlicensed dogs have been destroyed in the Zoutpansberg area, and 11,000 in the Letaba area. In addition over 12,000 dogs in the area have been immunised. These measures have resulted in a marked decrease in the incidence of rabies.

In spite of the high incidence amongst domestic animals the number of human contacts have been relatively low, and anti-rabic treatment was instituted in all persons as soon as it was established that there was

definite risk.

It has been shown that neurological complications arise in about 1-600 to 1,200 persons injected with rabies vaccine. Although the complications may be mild and transitory, serious paralysis and even death may supervene, and for this reason, treatment has been confined only to those definitely at risk.

#### 8.—RIFT VALLEY FEVER.

In the Union of South Africa the first tangible evidence of Rift Valley Fever points to the latter part of 1950 as the starting point of the epizootic although positive diagnosis was not made until the 12th April, 1951. During this time reports were received by State Veterinarians of heavy mortality in sheep and cattle in the Western areas of the Orange Free State; the cause of the mortality was diagnosed severally as enterotoxaemia; lamb dysentery, blue tongue, etc. That these diseases existed at the time and that some mortality was due to them has been confirmed. This led to consierable confusion in establishing the diagnosis of a disease new to the country.

Then followed reports of heavy losses of sheep in the Kaffir River area of the Orange Free State in February, 1951, but it was not until after a new disease in lambs was reported from Koffiefontein and the illness of several persons who conducted a post-mortem on a valuable bull which died at Palmietfontein that Rift Valley Fever was suspected; the diagnosis here was confirmed by the use of serum obtained from Kabete Laboratories in

Kenva.

To date the South and South-Western areas of the Orange Free State, the Northern areas of the Cape Province and isolated areas in the Southern Transvaal as far east as Standerton have been affected. The outbreak at Palmietfontein was four miles from the international airport of that name and eleven miles from Johannesburg. This was however, fortuitous as thorough investigation could not establish proof of the

introduction of the disease by air.

The mode of transmission of the virus in South Africa has not yet been established but the route of infection has great public health significance if risk of infection could be shown to exist without humans coming into direct contact with susceptible animals. At present the two most important routes of infection which should be considered are: (a) the likelihood of transmission of virus to man by different species of mosquitoes or other blood sucking arthropods, and

(b) transmission by the ingestion of milk or meat of infected animals. The latter route would change the risk of infection from the agricultural to the urban

populations.

An arthropod vector or vectors is indicated in the outbreaks because the infection did not spread from animals infected in the laboratory to others which were in contact with them. Further, many human cases are on record of wives nursing their husbands through the

disease without themselves becoming ill.

The public health hazard of an epidemic of Rift Valley Fever lies mainly in the risk of complications in the eyes of those contracting the disease. Nearly ten per cent. of confirmed cases suffered from impaired vision. Most subsequently recovered almost complete vision, but a few retained distressing symptoms. In all those who became ill at the time of the epizootic, symptoms akin to severe influenza were manifested; a great number complained of vague symptoms, but it must be borne in mind that there are very few confirmed diagnoses actually on record. The course of the disease would appear to be very mild for the majority of people with, however, a long period of immunity acquired as a result. Severe cases appear to have occurred where actual inoculation by infected blood from animals took place. The population present in the affected areas was approximately 500,000 of whom a considerable number were in direct contact with sheep and actually exposed to infection.

The danger seems to be in an insect vector which could transmit the virus from animal to man and from man to man even under urban conditions. It is impossible to assess this danger in the absence of evidence pointing to a definite vector and to the probable endemic reservoir of the virus. Nevertheless, there may be danger of infection reaching urban centres out of direct contact with susceptible animals through animal by-products; some cases of Rift Valley Fever in humans have been confirmed in both Kimberley and Kroonstad, where there was no obvious contact with animals

outside the urban area.

Control measures aimed at the protection of susceptible humans would be dependent on measures applied for the protection of animals from infection. The practice of good environmental sanitation appears to be the answer. Mass immunisation accompanied by the use of the new residual insecticides either as larvicides or as imagocides can readily be carried out. When animals have been protected, humans will be shielded to a great extent against infection, and with the application of certain other public health measures adequate protection against transferance of the virus to humans could be assured.

#### 9.—SMALLPOX.

Statistics: Table II (7), page 65.

The incidence of smallpox in the Union for the year 1952, showed a marked drop over previous years, 80 cases being notified. This is the lowest figure yet recorded, and includes 35 cases which occurred among native squatters on a farm bordering on the urban communities of Klerksdorp, Orkney and the Western Reef compounds. The outbreak was promptly brought under control by officers of the Department who conducted an intensive vaccination campaign and a house to house search for concealed suspected cases.

Vaccination campaigns are continually being conducted by the Department of Health through its district

surgeons and field staff.

#### 10. Tuberculosis.

Statistics: Table II (8), page 66.

The extent of the problem.—(a) Mortality.—(i) Table II (8) reflects registered deaths from tuberculosis (all forms) in the Union, in age, sex and race groups for the calendar years, 1945-51. Similar details in respect of Natives are not available due to the fact that deaths in rural areas have been compulsorily registerable only since 1st July, 1952. Thus, although registered deaths from

tuberculosis in Natives totalled 7,025, 7,117 and 6,984 during the years 1949, 1950 and 1951 respectively, these figures are incomplete and it is estimated that annual deaths are in excess of 10,000. Total annual deaths in all races in the Union could then be estimated to be as follows:—

-	1945.	1946.	1947.	1948.	1949.	1950.	1951.
Europeans. Asiatics Coloureds Natives	758 504 4,139 10,000	773 473 4,164 10,000	773 440 4,347 10,000	772 435 4,431 10,000	684 441 4,501 10,000	639 363 4,132 10,000	566 329 3,949 10,000
All races	15,401	15,410	15,560	15,638	15,626	15,134	14,844

(ii) Mortality rates per 100,000 population from tuberculosis (all forms )in Europeans, Asiatics and Coloureds are set out below in tabular form. See also graph "A". (For reasons stated above, mortality rates in Natives are not available.)

	1945.	1946.	1947.	1948.	1949.	1950.	1951.
Europeans.	32·4	32·6	31·8	30·8	26·6	24·5	21·4
Asiatics	180·1	165·1	149·0	142·8	140·4	103·4	90·0
Coloureds	452·2	446·8	455·0	452·9	448·3	386·9	358·3

In common with many countries, death rates in the Union have shown a marked decline since 1949, and the 1951 rate of 21·4 per 100,000 in Europeans compares very favourably with rates in other Western countries. Attention, however, has been drawn by many authorities to the fact that the decline may be an artifact due largely to recent improvements in the treatment of tuberculosis by bacteriostatic substances such as streptomycin, P.A.S. and I.N.H. and which have at least postponed many deaths from tuberculosis. Nevertheless, mortality rates in non-Europeans remain extremely high—the 1951 rate in Coloureds is seventeen times as high as the European rate—and the fight against tuberculosis in this country must obviously be intensified on all fronts.

(iii) Specific Death rates.—Graph B shows age specific death rates in Europeans centred on the census years 1926, 1936 and 1946 and in the last year for which age distribution of the estimated population is available viz 1950. During the past 25 years there has been a definite lowering of mortality rates in young males, but rates in older males have remained consistently high. This trend has been found in other countries. It is not known what factors are responsible and what are the conditions of life so progressively unfavourable for males from the age of 30 onwards and which have not improved during later life in recent years.

In European females, as in other countries there has been a most satisfactory improvement in successive years, and with marked flattening of the familiar peak in the 20,20 years ago group

in the 20-30 years age group.

The graph for European persons once again demonstrates the improvement in the death rates in the younger

age groups during the past 25 years.

By way of comparison with European rates, age and sex specific rates in Europeans, Asiatics and Coloureds are shown in Graph C, for the year 1946 (age distribution of the population in non-Europeans is not available in any subsequent year). The high crude death rates from tuberculosis in non-Europeans has already been referred to, but this graphic representation clearly demonstrates the wide racial disparity and the appalling rates in certain age groups—more particularly in Coloured children under five years, in Coloured females in 20–25 year age group and in Coloured males over 40.

(iv) Percentage distribution of deaths by age, sex and race during the years 1948-50 is set out in histogram "D". In Europeans 9.6 per cent. of total deaths from tuberculosis were in children under five years of age. This figure has shown progressive increase during the past 25 years—it has risen from 7.4 per cent. in 1926,

to the alarming figure of 10.07 per cent. in 1951. Since deaths in this age group are caused almost entirely by infection in the home it is manifestly clear that greatly increased efforts should be made to prevent young children from being exposed to infected persons and from being fed with unboiled or unpasteurised milk. In Asiatics and Coloureds, no less than 20 per cent. of total deaths from tuberculosis in these races occurred in children under five years of age.

Further, deaths in the two sexes were not distributed in the same proportion in the various races—in Europeans 62·3 per cent. of deaths were in males, mostly in older age groups—whereas in non-Europeans 51·3 per cent. were in males. Again, the high degree of mortality in non-Europeans is borne out by fact that 76 per cent. of total tuberculosis deaths in non-Europeans occurred in persons under 40 years of age, i.e. during the period of greatest productive activity.

(v) Proportionate Mortality.—In the following table, deaths from tuberculosis are expressed as percentages of deaths from all causes, during the years 1945-51.

	1945.	1946.	1947.	1948.	1949.	1950.	1951.
European	3·5	3.8	3.7	3·4	3·0	2·8	2·4
Asiatic	12·4	12·3	11·8	10·5	12·0	9·0	9·2
Coloured	20·0	21·7	22·3	21·0	19·8	19·0	18·4

It is encouraging to note that the overall proportionate mortality has shown improvement in all racial groups during the last three years.

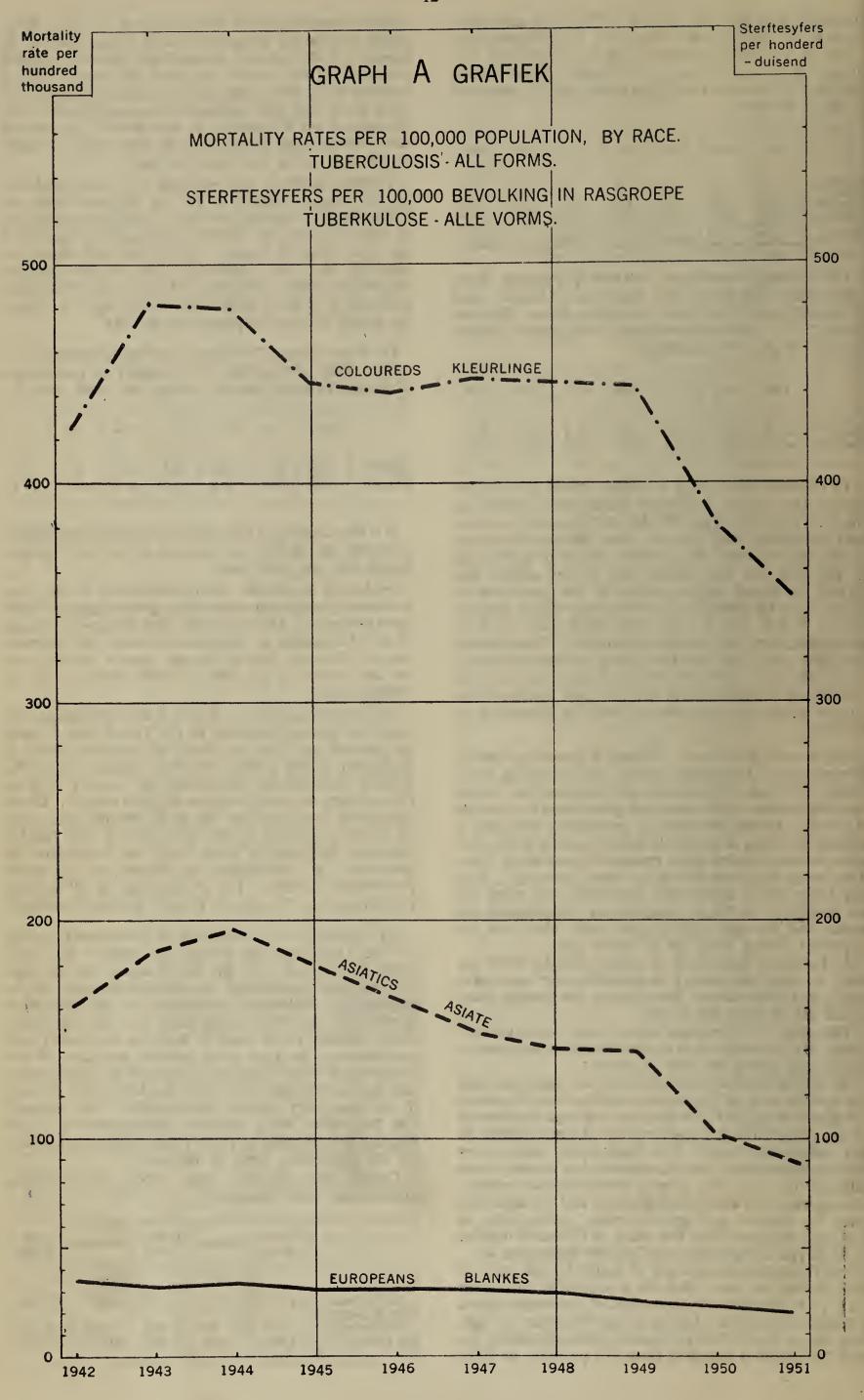
In Graph E, deaths from tuberculosis in age, sex and racial groups are expressed as percentages of deaths from all causes. Once again the high degree of mortality in non-Europeans is demonstrated—note for example that in Coloured females in age groups 15–20 years, no less than 62.5 per cent. of total deaths is due to tuberculosis.

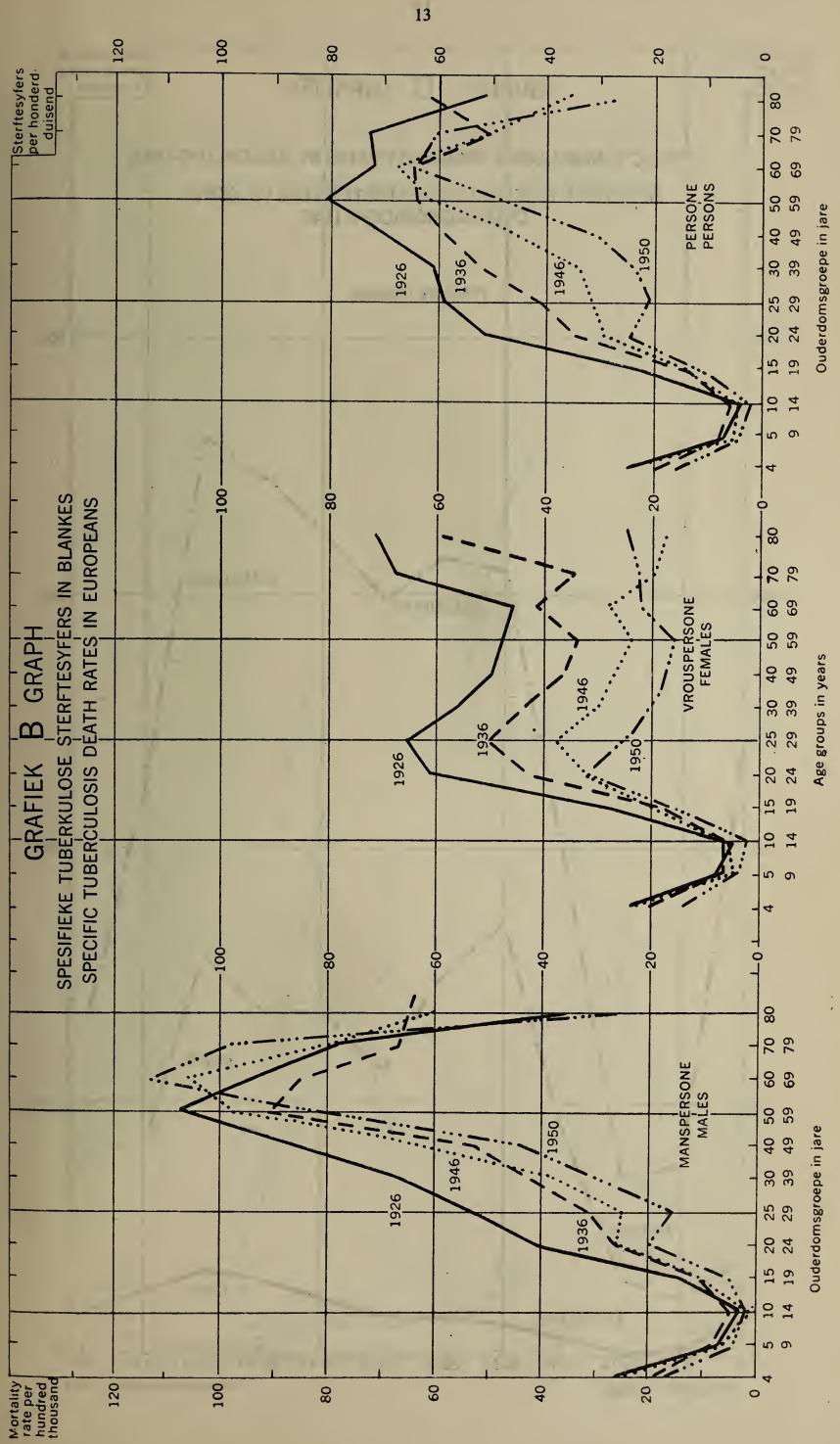
The above analysis of deaths from tuberculosis are based on deaths registered in the Union, but it must be pointed out that the value of mortality rates is dependent on the quality of clinical diagnosis made by medical practitioners throughout the country, and on the accuracy and completeness of death returns. Death certificates have provided the basis for the major part of medical statistics of the past century and reliable statistical information must form the foundation of prevention of tuberculosis as indeed of all other preventable diseases. The co-operation of all medical practitioners in this matter is most earnestly solicited.

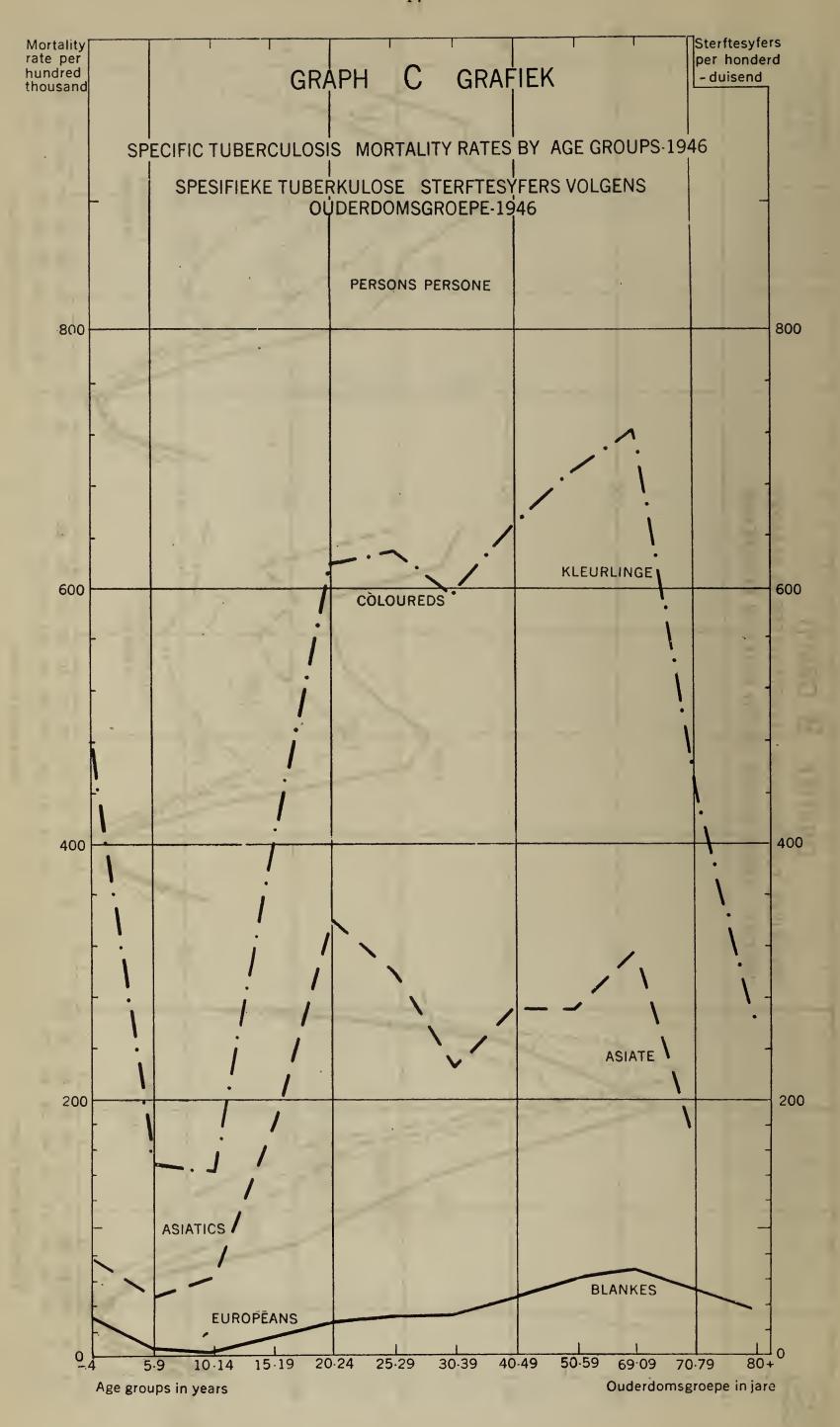
(b) Morbidity.—The incidence of tuberculous disease in the Union can be arrived at either by complete notification of all active cases, or by mass radiographic examination of adequate samples of the population. Although notification of all forms of tuberculosis has been compulsory for over 30 years, much remains to be done to improve its quality and completeness, so that more reliable statistics of the incidence of tuberculosis can be obtained. Such sound and detailed statistics are badly needed in this country if the campaign against tuberculosis is to succeed. On the other hand multiple notification of cases frequently complicate the picture and adequate machinery for its elimination must be devised.

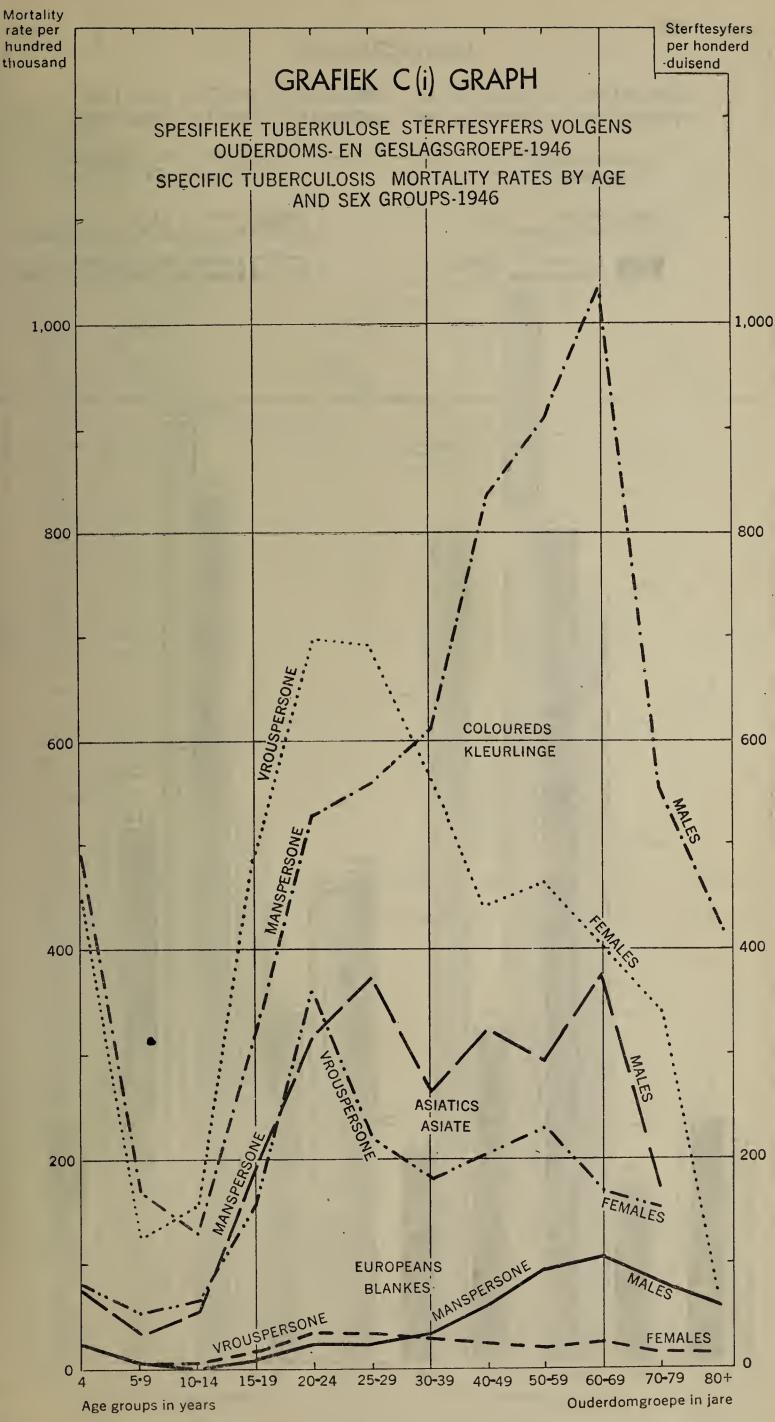
During the calendar year 1952 the following notifications were received:—

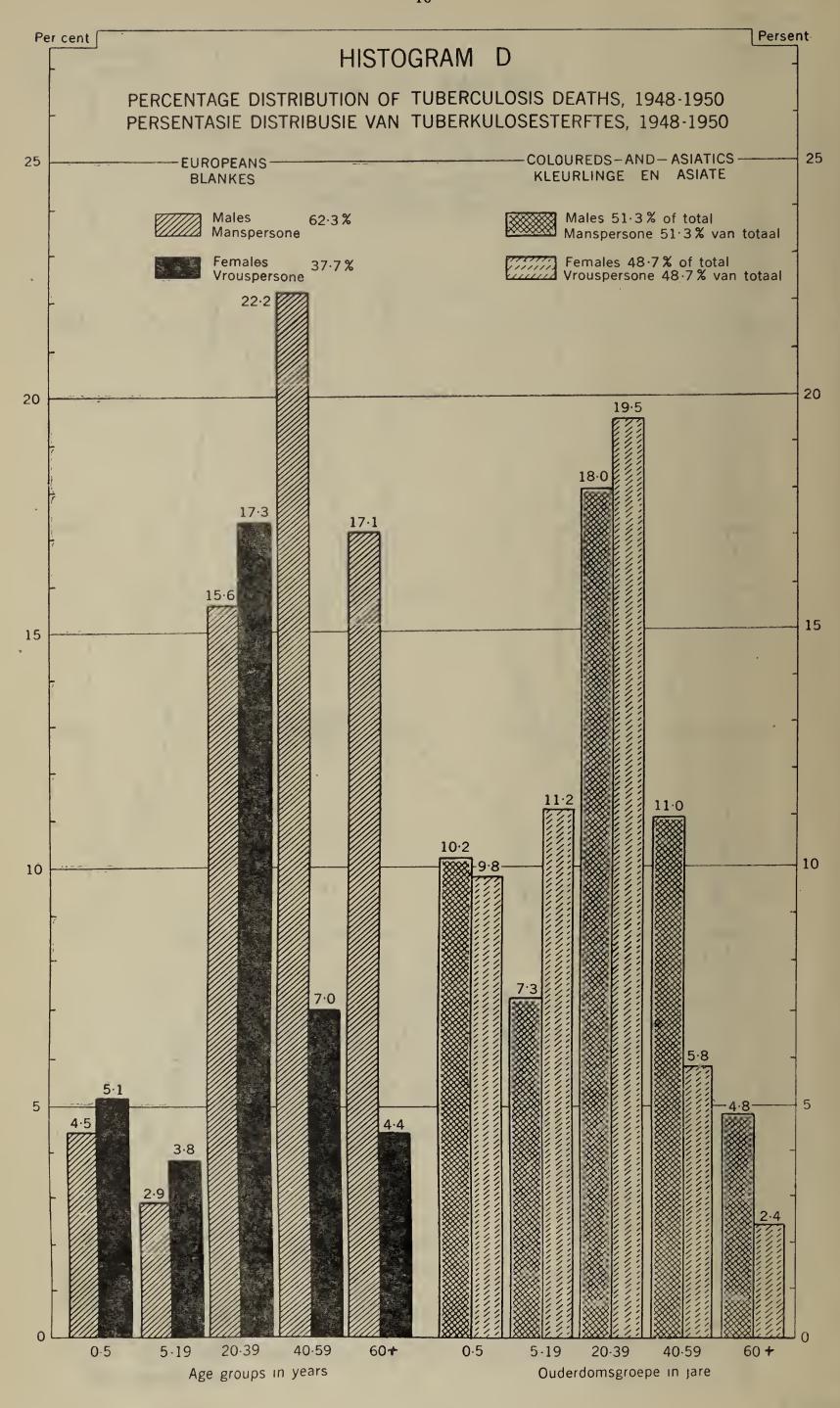
	Colou- red.	Native.	Races.
721	5,140	18,064	25,324 3,505 28,829
		97 443	97 443 2,878

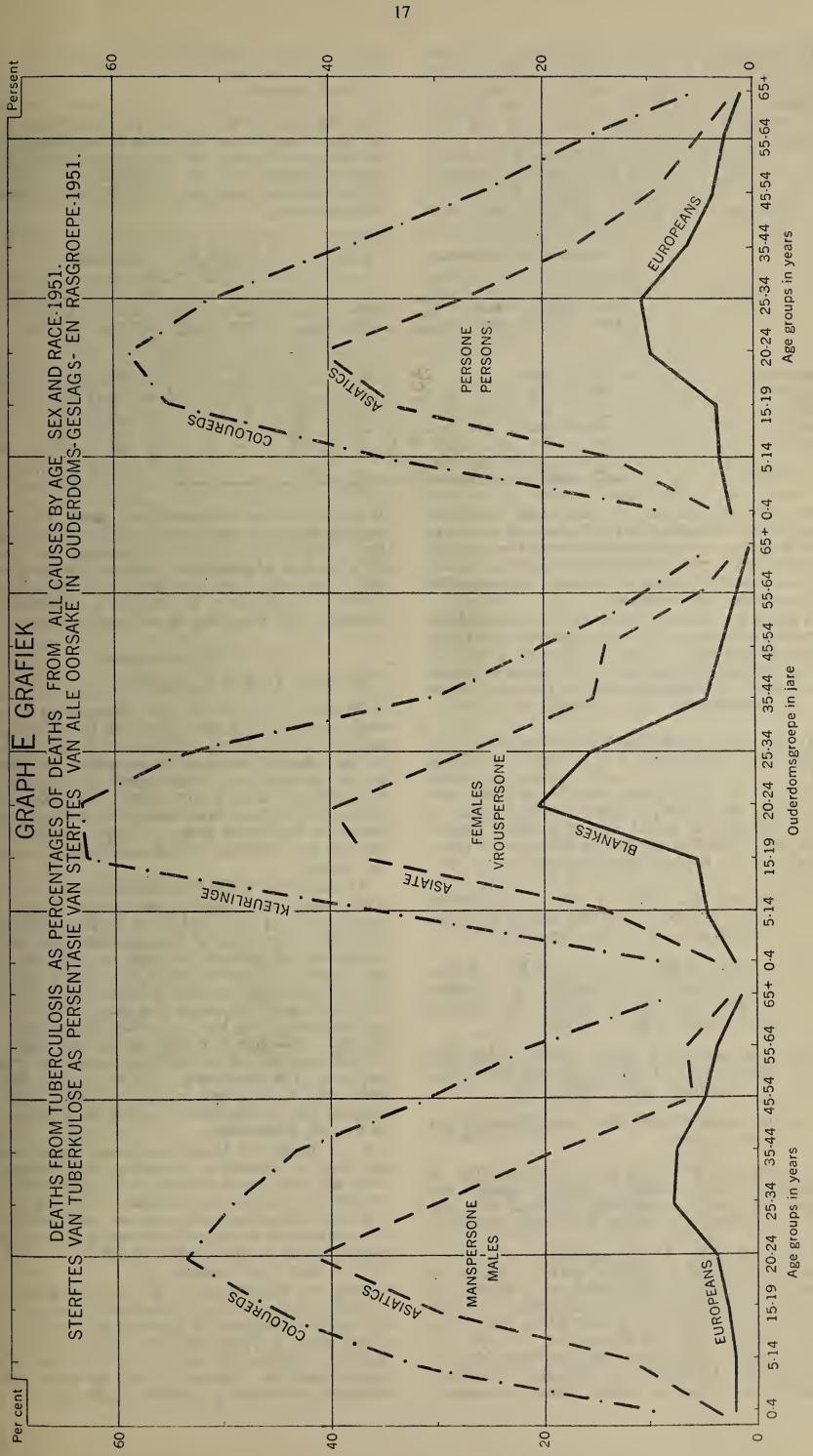












The four departmental mass radiographic units have conducted surveys in all races and in urban and rural areas of the Union during the past five years and a total of almost 500,000 exposures has now been reached. Very valuable epidemiological information has been obtained and the incidence of active respiratory tuberculosis has been found to be ·1 per cent in Europeans and from ·7 to 1 per cent in non-Europeans, depending on the nature of the sample. Applying these rates to the population it can be assumed that in the Union

there are about 2,700 active cases of respiratory tuberculosis in Europeans and from 70,000 to 100,000 cases in non-Europeans.

(c) Facilities for Institutional Care and Treatment.— During the period under review the Department has conducted a survey of all institutions providing accommodation for cases of respiratory tuberculosis, and available beds as at year ended 1952, were distributed as follows:—

Institutions.	Са	PE.	Transvaal.		NATAL.		ORANGE FREE STATE.		Union.		
	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Total.
Departmental. Local Authorities. Mission. Provincial. Private. S.A.N.T.A.	262 232 — 50	440 1,412 284 — 106 166	20 — 236 —	234 208 100 — 48	141 -2 200 -18	1,119 39 482 278 24 108	31 = = -	65 — — — 64	403 283 2 200 286 18	1,793 1,724 866 278 130 386	2,196 2,007 868 478 416 404
Total	544	2,408	256	590	361	2,050	31	129	1,192	5,177	6,369

With an estimated total of about 15,000 deaths per annum from tuberculosis in the Union, and a total of 6,369 beds, it is clear that every effort should be made not only to increase this number of beds, but also to ensure maximum possible turnover of available beds compatible with good care and treatment.

In regard to improved turnover per hospital bed, the settlement programme of South African National Tuberculosis Association will play a vital role in relieving pressure by making available, at low capital and mainnance cost, bed accommodation for patients who are able to some extent to care for themselves.

- (d) The Prevention of Tuberculosis.—There are non-specific and specific ways of preventing tuberculosis and the non-specific factors which improve the general standard of living of people are probably the most effective by far in the prevention of tuberculosis. A control programme should include plans to counter those factors which lower general resistance to tuberculosis and the following are important:—
  - (i) Malnutrition.—Whether due to inadequate intake of food, unbalanced diet or ignorance of food values and food preparation.
  - (ii) Fatigue.—Whether produced by hard physical work unhealthy living conditions, alcoholism or drug addiction, of which dagga smoking is important in South Africa.
  - (iii) The presence of non-tuberculous debilitating diseases such as syphilis, malaria, amoebiasis, schistosomiasis and helminthiasis.
  - (iv) Ignorance of basic health laws, personal and social hygiene.

"Environment constitutes the real headquarters of tuberculosis" and measures directed towards the removal of such environmental stresses will pay handsome dividends in human health and happiness.

Specific Methods.—B.C.G. vaccination is a widely accepted method of raising the specific resistance to tuberculosis. At a special conference in Durban in November, 1952 attended by Medical Officers of Health and Public Health Officials and at which two World Health Organisation authorities on B. C. G., Dr. C. Palmer of Tuberculosis Research Office, Copenhagen, and Dr. J. Holm, Chief, Tuberculosis Division, World Health Organisation, Geneva, were guest speakers,

is was decided to commence preliminary vaccination projects with the co-operation of certain local authorities. Such projects will assist in determining the special technical and administrative problems associated with B.C.G. vaccination and in particular will they make very valuable contributions in arriving at uniformity in technique and evaluation of tuberculin testing.

#### 11.—TYPHOID FEVER.

Statistics: Table II (9), page 67.

There is no doubt that the incidence of typhoid fever and allied infections is high in the Union, especially among the rural Native population. Its prevalence is an indication of the unsatisfactory sanitary conditions and of the ignorance of the elementary principles of hygiene that exist in our rural areas. The prevalence of tyhpoid in the rural areas constitutes an ever-present danger to the urban areas, for a proportion of the Natives, who contract the infection become carriers of the disease.

As more of the towns have taken steps to protect and purify their water supplies, water-borne typhoid has become less frequent and dairy produce and other foodstuffs have assumed an important role in the conveyance of typhoid infections in such areas. In the smaller urban areas and in the country, however, water for domestic purposes is frequently drawn from the nearest available source and used without boiling or treatment of any kind. As many such sources are exposed to pollution by human excreta, such water may easily become the vehicle for the conveyance of typhoid infection. The complacency with which many persons make use of untreated irrigation furrow water for domestic purposes is surprising, and the practice is to be strongly deprecated.

In an endeavour to prevent known carriers from engaging in occupations involving the handling of foodstuffs, certain local authorities offer suitable employment to these individuals; but these efforts have usually met with limited success and, not infrequently, all trace of a carrier is lost until perhaps he is found again engaged in an occupation that entails the handling of milk or other food supplies.

While the Department, as well as local authorities, is doing all it can to make immunisation available to all, the Bantu people are as yet not sufficiently conscious of the value of typhoid immunisation, with the result that they frequently do not present themselves for the second injection. This is a field in which health education can make a valuable contribution.

#### 12.—TYPHUS.

Statistics: Table 11 (10), page 72.

In the Union typhus fever occurs almost exclusively in the Native communities. During the period under review outbreaks of the disease were reported in each of the four provinces, but, owing to the very imperfect notification of cases in the large Native reserves, statistics are inaccurate and of little value in assessing the true incidence of the disease in the Native pouplation of the Union

In the Transkei and Ciskei, which have a combined area of approximately 36,200 square miles, and a population of approximately two million, 611 cases of typhus were discovered in the year ended 30th June, 1948. As in previous years, the district of St. Marks was the most seriously affected, 137 cases being discovered there. This epidemic spread through the districts of Tsomo, Nqamakwe, part of Engcobo, Butterworth, and Willowvale, accounting for a further 156 cases. A smaller epidemic in the Keta Keta location in Mount Fletcher district, occurred early in that year, and accounted for 59 cases. In the Ciskei typhus did not reach epidemic proportions, but sporadic cases occurred throughout the year.

During August and September, 1947, an epidemic resulting in the discovery of 130 cases with 31 deaths occurred in the Barkly West district; and during June, 1948, 48 cases of typhus with eight deaths occurred in the Taungs district. In Natal, typhus was confined to four districts, only 41 cases being notified for the year ended 30th June, 1948, as compared with 148 cases

for the previous year.

During the year ended 30th June, 1949, 220 cases were reported from the Transkei and Ciskei, 22 from

Natal and 15 from the Orange Free State.

The incidence of typhus has declined very markedly since 1949 due to: (1) the use of D.D.T. by the departmental field staff; and (2) the fact that natives are awakening to the value of D.D.T. as an effective insecticide and can purchase it at stores for their own use. Proof of this is found in the number of cases notified in 1950 which amounted to 158 with five deaths, whilst during the period July, 1950, to December, 1951, only 196 cases were recorded with twelve deaths. The year 1952 reached the lowest since 1933, as only 98 cases were notified with eight deaths.

#### 13.—VENEREAL DISEASES.

Owing to the fact that the venereal diseases are not notifiable in South Africa and that the overwhelming majority of district surgeons are unable to furnish reliable statistical data in respect of the number of patients treated by them at the numerous rural treatment centres, the true incidence of these diseases is not known. However, from reports thus far received from local authorities, district surgeons, health centres and departmental and mission hospitals, it would appear that there has been a decrease during the year in the number of new cases of syphilis and gonorrhoea presenting for treatment and an increase both in the overall attendances by patients and in the percentage completing treatment.

This improvement can mainly be attributed to the general use, since 1948, of penicillin in the treatment of gonorrhoea, to its increasing use since then in the treatment of syphilis, and to the fact that the Native population in general has become increasingly aware of the advantages to be gained from early and regular treatment with the "new government injections", as procaine penicillin in oil with two per cent. aluminium

monostearate (P.A.M.) is termed by them.

Penicillin is now the sheet anchor in the treatment of early infectious and prenatal syphilis and of gonorrhoea. The excellent results thus far obtained with penicillin in the treatment of these diseases holds considerable promise for the future when it ousts the toxic arsenicals in the treatment of syphilis. It is anticipated that the arsenical drugs will be abandoned

completely for the treatments of syphilis during the coming year when penicillin (P.A.M.) exclusively will be supplied by the Department therefore. If the advantages claimed for the new repository penicillin preparation, currently under trial in the United States of America and also in several World Health Organization-assisted mass-treatment treponemal campaigns, are confirmed, it will provide this country with a more powerful weapon for single-injection mass-treatment campaigns in areas where syphilis is very prevalent. The institution of mass-treatment procedures, it is hoped, will result in the reservoir of infection in this country being reduced to a considerably lower level within a relatively short period. Although large-scale mass-treatment campaigns have not been possible during the year, nevertheless, several small-scale mass-treatment campaigns with a single injection of 2,400,000 units P.A.M. have been undertaken successfully by a number of the district surgeons of the large and sparsely populated districts.

As a consequence of the extensive use of penicillin and other antibiotics in this country and the fact that antisyphilitic treatment, particularly in urban areas, can now be administered more practically in out-patient rather than in in-patient facilities, there has been a considerable reduction in the number of syphilitic cases treated in hospitals during the year under review. At Rietfontein Hospital, near Johannesburg, where 420 beds for venereal disease patients were fully occupied when the treatment of syphilis was by means of arsenic and bismuth, it was noted during the first quarter of the year that only one-quarter of the available accommodation was being used for venereal patients. In order to use this surplus accommodation to the best advantage, and having regard to the urgent need for accommodation for non-European tuberculosis patients, it has been decided to utilise 300 of these beds for cases of pulmonary tuberculosis. It is anticipated that an additional number of beds reserved for venereal patients in this institution, as well as those in the Amatole Venereal Disease Hospital, King William's Town, and in the numerous mission hospitals throughout the country, will become available for non-European tuberculosis cases during the coming

Numerous additional treatment centres, visited weekly by district surgeons and catering primarily for non-Europeans in isolated rural areas where transport facilities are limited or lacking, have been established in various parts of the country. On the whole, these have been fairly well supported, but the non-European defaulter rate is still too high, due, in many instances to the regrettable lack of co-operation on the part of

employers.

In addition to district surgeons and local authorities, Health Centres, which have been established in various parts of the country, continue to play a prominent part in the control of venereal disease in their areas. The success achieved by them is attributable, in a large measure to the fact that they have at their disposal trained personnel who undertake contact tracing, that treatment is available all day long and that the sitgma, which many patients feel attaches to a visit to a clinic specifically conducted for the treatment of venereal disease, is not associated with a visit to a Health Centre.

#### 14.—YELLOW FEVER.

Mosquito Survey.—Following the decision of the Transvaal Chamber of Mines to fly native recruits from Central African territories to Johannesburg, a survey of the Witwatersrand was begun in December, 1951, to gather information on the local distribution of possible mosquito vectors of virus diseases. The mosquitoes were identified by the Government Entomologist attached to the Plague Research Laboratory and the survey was carried out by the laboratory staff in co-operation with representatives from ten local authorities and 33 mines. 8,362 mosquito specimens comprising six species of Anopheles, one Theobaldia, seven Aëdes and eleven Culex were collected and

identified from an area of some 600 square miles. The survey results form the subject of a Special Report.

In August the survey was reorganised and extended to include the 60 major towns and villages of the Transvaal. The municipal authorities and the Department's own malaria staff are co-operating in collecting material. The urban survey is still in progress and is complementary to field surveys being conducted by the Council for Scientific and Industrial Research.

## (V) HEALTH CONTROL AT SEAPORTS AND AIRPORTS.

Statistics: Table III, page 74.

It is one of the duties of the Department of Health to prevent the introduction of disease into the Union through ports and airports and to ensure that all necessary precautions are taken to protect the public health. Methods of health control are changing very rapidly to conform with the greatly increased volume of passenger traffic, particularly of air travellers.

The adoption of the International Sanitary Regulations by the World Health Assembly applicable to international travel and traffic was an exceedingly important health measure. Some of the measures such as the granting of pratique by wireless, have been in operation in the Union for some time. It was first introduced for vessels plying between coastal ports and later extended to ships from the high seas carrying ships' surgeons. This measure has proved to be both successful and practical.

Palmietfontein, the temporary National Airport has been functioning as the main port of entry into the Union of all aircraft. The Jan Smuts Airport which will be opened in 1953, will be designated a sanitary airport in terms of International Sanitary Regulations. The check of passengers' yellow fever certificates as well as the spraying of aircraft which come from the endemic yellow fever areas will be undertaken by officers of the Department of Health.

Cordial liaison has been established and maintained between the various departments functioning in the ports of entry to the Union. Special ancillary services such as venereal disease clinics and yellow fever inoculation for seamen and the travelling public have been maintained.

The notification of notifiable diseases by ships' surgeons has been systematised and weekly returns of notifications are now rendered.

Unremitting vigilance is being exercised to prevent the introduction by sea or air of any of the quarantinable diseases to which Durban by reason of its geographical position is especially susceptible. Because the species of mosquito and the climatic and environmental conditions conducive to an outbreak of yellow fever are present the strictest precautions are taken that aircraft arriving from the endemic yellow fever areas are properly disinsected and that travellers on such aircraft who are not immunised and consequently may be incubating the disease are isolated in mosquito-proofed quarters.

As a consequence of the latest World Health Organisation delimitation of the endemic yellow fever area to include the whole of the Tanganyika coastline it is no longer unusual for ships to arrive from ports inside the endemic yellow fever area within the six day incubation period of the disease. The shipborne, introduction of yellow fever can no longer be discounted, and mindful of this, consideration is being given to disinsection of ships and their examination for Aedes aegypti while passengers and crew are being subjected to more careful scrutiny in respect of their inoculation certificates.

The usual care is being taken to guard against the dissemination of other major epidemic diseases by ships from the east. Special quarantine measures were imposed on ships from Mauritius at a time of a severe epidemic of poliomyelitis on the island.

## (VI) NURSING, MATERNITY AND CHILD WELFARE SERVICES.

Statistics: Table IV, page 76.

- (a) General.—Responsibility for inspection, supervision and investigation of these services was transferred in August, 1951, to the respective Regional Offices then functioning, and to the Southern Transvaal Regional Office in January, 1952. Simultaneously, the posts of "Supervisor of Nursing and Maternity Services", were abolished and the number of posts of "Inspectress of Nursing and Maternity Services" was increased to six. One inspectress is attached to each Regional Office.
- (b) Nursing and Maternity Services subsidised in terms of Act No. 57 of 1935.—Sections Nos. 13, 14 and 15 of Act No. 57 of 1935 were again amended by Sections Nos. 26, 27, 28 and 32 of Act No. 44 of 1952. The main implications of the amendments are:—
  - (1) Refunds payable in terms of Sections 14 (a) and 15 (a) are increased from 75 per cent. to  $87\frac{1}{2}$  per cent
  - (2) Provision is made for a grant-in-aid towards transport costs.
  - (3) Restrictions are imposed regarding salaries payable.

Table IV (1) shows the number of nursing and midwifery posts established in terms of the various sections of Act No. 57 of 1935, as amended.

Although new services are constantly being established, the total number of posts has diminished since last year. This is due to:—

- (1) Abolition of posts which have not been filled for a long period.
- (2) The conversion of a number of extra-institutional services to institutional services, necessitated by increasing demands for hospitalisation.
- (c) Maternal and Infant Mortality Rates.—These are shown in the statistical section of this report. See Table I, pages 27–28.
- (d) Private Nursing and Maternity Homes.—The regulations governing Nursing and Maternity Homes were amended in July, 1950, and since then, only Nursing and Maternity Homes in the Transvaal and Orange Free State are registered with the department. Those in the Cape Province and Natal are licensed by the respective Provincial Administrations.

Section 133 (2) of Act No. 36 of 1919, which deals with the Registration of Nursing and Maternity Homes has been amended by Section 23 of Act No. 44 of 1952.

(e) Midwives.—No additional areas were proclaimed as prescribed areas in terms of Section 39 of Act No. 13 of 1928, as amended by Act No. 45 of 1944, and the regulations regarding persons practising midwifery were not applied to any additional areas during the year under review.

## (VII) GOVERNMENT LABORATORIES AND BIOLOGICAL CONTROL.

Statistics: Table V, page 77.

Departmental Laboratories are maintained at Cape Town and Durban and are under the control of the Deputy Chief Health Officers for the respective areas. In addition to performing routine laboratory examinations and conducting autopsies in police mortuaries the Government Pathologist at Cape Town is responsible for Biological Control and the control of therapeutic substances as well as the manufacture of small pox vaccine.

In the case of Durban, with the development of the Natal Provincial Administration's Laboratory Service the number of specimens received from Provincial Hospitals was much reduced, but was offset by an increase in the work received from Departmental Institutions, from other Central Government Departments and from Local Authorities and Medical Practitioners. The expansion of work affected in particular the bacteriological, haematological, biochemical and histological sections of the laboratory.

In Cape Town, as in the immediate previous years, the laboratory suffered seriously from frequent staff changes. The two posts of Assistant Pathologist were occupied by five different incumbents during the year under review. The pharmacologist's post remained vacant until August, and a great strain was thrown on the senior staff.

During the year a Committee of Inquiry was appointed by the Minister to report upon various aspects of the Department's laboratory needs. The terms of reference were to investigate and report on routine examinations for public health purposes, the manufacture of vaccines and sera, research work, medico-legal laboratory services and the costs of such services. The committee was also required to report on the relationship between such services and the blood transfusion laboratory services and other existing and proposed laboratory services as well as personnel training facilities.

The Biological Control Section of the Cape Town Laboratory is responsible for the carrying out of the Therapeutic Substances Regulations of the Medical, Dental and Pharmacy Act (No. 13 of 1928) with a view to ensuring that all therapeutic substances which are manufactured in the Union or imported for sale, comply with specified legal standards for quality, purity and

potency.

The work of the section comprises—

- (a) the issue of licences for the manufacture or import of the scheduled therapeutic substances
- (b) the inspection of factories or laboratories in the Union wherein these substances are prepared or processed;
- (c) the carrying out of biological assays of samples of these substances.

The activities of both laboratories are seriously hampered by lack of staff.

# (VIII) DEPARTMENTAL HOSPITALS AND INSTITUTIONS.

The following is a list of Departmental Hospitals and Institutions:—

	Nrn	_					
	Number of Beds.						
	Euro- pean.	Non- Euro- pean.	Total.				
Tuberculosis.  King George V Hospital, Durban. Nelspoort Sanatorium	141 102 — 22 138 —	1,119 132 234 150 — 120 38	1,260 234 234 172 138 120 38				
Total	403	1,793	2,196				
Mental Hospitals and Institutions for the Feebleminded.  Alexandra Institution, Maitland, Cape.  Oranje Hospital, Bloemfontein Fort England Hospital, Grahamstown.  Tower Hospital, Fort Beaufort Fort Napier Hospital, Pietermaritzburg.  Town Hill Hospital, Pietermaritzburg.  Komani Hospital, Queenstown Kowie Hospital, Port Alfred Umgeni Waterfall Institution, Howick.  Sterkfontein Hospital, Krugersdorp. Weskoppies Hospital, Pretoria Valkenberg, Hospital Observatory Cape  Witrand Institution, Potchefstroom.	833 644 625 — 997 320 616 — 380 324 912 784 1,631	59 900 102 1,833 696 536 676 559 100 594 878 675 664	892 1,544 727 1,833 1,693 856 1,292 559 480 918 1,790 1,459 2,295				
Total	8,066	8,272	16,338				

	Number of Beds.						
	Euro- pean.	Non- Euro- pean.	Total.				
Leprosy Institutions. Amatikulu, Zululand Bochum, Pietersburg, Transvaal Mjanyana, Transkei Mkambati, Pondoland Westfort, Pretoria		78 172 94 254 1,144	78 172 94 254 1,244				
Total	100	1,742	1,842				
Venereal Disease Hospitals. Amatole, King William's Town Vryburg Zeerust	_ _ _	65 24 10	65 24 10				
Тотац		99	99				
Infectious and Formidable Epidemic Diseases. Rietfontein, Johannesburg	49	440	489				
TOTAL	49	440	489				

#### (IX) HEALTH CENTRES.

Statistics: Table VI, pages 87-88.

In spite of the considerable difficulty which, at times, has been experienced in staffing those centres situated some distance from the larger urban areas, no health centres have had to be closed during the year.

The attendance at all centres has throughout been high, which in itself is proof of the volume of ill-health which seeks and can find relief extra-institutionally. Where necessary domiciliary visits are made by medical officers, nurses, midwives and health assistants.

In spite of the overwhelming demands of ill-health, the emphasis of health centre work still remains health education. This finds its most fruitful field in maternal and child welfare services and the attendance figures are encouraging.

During the year under review health centres were placed under the direct administrative control of regional

offices.

#### (X) DENTAL SERVICES.

Dental services to indigent persons which are provided or subsidised by the Health Department are as follows:—

- (a) By full-time and part-time dentists at some Health Centres. Owing to the great difficulty in obtaining the necessary staff, only a few full-time posts have been filled. (A full-time dentist provides dental services to indigent patients in the King George V Hospital, Durban).
- (b) In dental clinics, which employ full-time dental staffs, assisted by honorary dental surgeons. They are financed by grants from the Union Health Department, the Transvaal Provincial Administration and the local authority concerned Dental services to non-European indigent persons are provided at certain clinics in locations. The following are the clinics which are subsidized by the Health Department:—
  - (1) The City of Cape Town Dental Clinic.
  - (2) The Johannesburg Coronation Dental Clinic and Associated Clinics.
  - (3) The Pretoria Dental Clinic.
  - (4) Springs Dental Clinic.
  - (5) Vereeniging Dental Clinic.
  - (6) Boksburg Dental Clinic.
  - (7) Benoni Dental Clinic.
  - (8) Orlando Dental Clinic (Johannesburg).

The annual subsidies to these institutions from the Health Department amount to approximately £26,500.

- (c) In the Oral and Dental Hospitals of the University of the Witwatersrand and of Pretoria, which are staffed by both full-time and part-time dentists, a great deal of dental treatment is provided for indigent persons in addition to the teaching functions. These hospitals also receive a subsidy on a per attendance basis from the Health Department which amounted to £6,226 for the year under review.
- (d) By private dental practitioners. Extractions done by private dentists for indigent persons are paid for by the Department, and where necessary free dentures are provided. The amount paid for these dentures amounted to approximately £14,000 for the year under review.

Taking the salaries, etc., of the full-time and parttime dentists into consideration, more than £50,000 was spent on dental services.

#### DENTAL CARIES RESEARCH.

The Dental Health Officer continued his experimental investigations on the effect of different diets and fluorine on caries in monkeys. As these experiments take a long time to produce results, it is not yet possible to report on them. The monkeys are housed and fed at the South African Institute for Medical Research and the Health Department greatly appreciates the assistance and co-operation of this institution.

During July the Dental Health Officer visited Kenya on the invitation of the Director of Medical Services to investigate and report on the occurrence of chronic endemic fluorosis in the colony. Large areas were found to be affected and recommendations were made

for preventive measure to be taken.

# (XI) 1.—THE ADMINISTRATION OF THE FOODS, DRUGS AND DISINFECTANTS ACT No. 13 of 1929.

Statistics: Table VII, page 89.

The rapid development of antibiotic, chemiotherapeutic and other medicinal agents has created a constantly increasing demand for supplies of these new therapeutic substances which are imported into this country.

There has also, during recent years, been unusually rapid development in the food processing and canning industry of this country, the output being intended

for both local consumption and export.

The Department is conscious of its statutory obligation in connection with the country's supplies of foods, drugs and disinfectants but the volume of additional work arising from these new developments is already straining the existing inspectorate staff and available laboratory facilities to their utmost.

Every endeavour is however being made to meet the difficulties arising from these extraordinary circumstances, to which the present shortage of technically qualified personnel is adding an additional problem.

# 2.—ADMINISTRATION OF THE MEDICAL, DENTAL AND PHARMACY ACT (No. 13 OF 1928).

Statistics: Table VII, page 90.

During the year under review active steps were taken to endeavour to establish more effective control over the use of habit-forming drugs in the Union. Particular attention is being paid to the question of the use of methylmorphine (codeine) and pethidine hydrochloride as it has been noted that considerably increased quantities of these drugs have been used in the Union in recent years.

As in previous years considerable quantities of dagga were confiscated in the course of investigations and burned when legal proceedings were finalised. The Inter-departmental Committee of Inquiry into dagga completed its report and published its findings.

The excessive use of the amphetamines is causing the Department great concern and a warning has been issued to medical practitioners to use these addiction

producing drugs with discretion.

The Act permits of poisons and preparations containing poison being stocked and sold by general dealers under a system of certificates issued by magistrates. General dealers' premises have been regularly inspected as in the past, and reports have disclosed that the position regarding the observance of the provisions of the Act still leaves much to be desired.

Reports have been received from certain districts of the increasing use of certain poisons, especially strychnine, which is a recognised agent for the destruction of vermin. Large supplies of this poison are stocked and sold by agricultural societies in contraventon of the provisions of the Act, which only permits the stocking and sale of this poison by firms of chemists and druggists, or alternatively the magistrate. Prosecutions have been instituted in this respect and numerous warnings issued.

The Department continues to take suitable steps to endeavour to ensure that the provisions of the Act in regard to the keeping and sale of poisons are complied

with in the interests of public safety.

#### (XII) INTERNATIONAL HEALTH.

Mention was made in the Annual Report on the work of the Department for 1947 of the fact that the Union was a member of the World Health Organisation. The report also reviewed in some detail the events leading up to the establishment of the Organisation as well as its aims and objects. Since ratifying the constitution in August, 1947, the Union has played a prominent role in the activities of the Organisation and has been represented at all meetings of the World Health Assembly and several other meetings and conferences held under the auspices of the Organisation.

During 1952 the Union was represented at the undermentioned meetings convened by the World Health

Organisation:-

Fifth World Health Assembly held at Geneva from the 5th to 22nd May, 1952.

Chief Delegate.—Dr.
B. M. Clark, Deputy
Chief Health Officer,
Department of Health.

Delegate.—Mr. A. A. M. Hamilton, Political Secretary, South Africa House, London.

Second Meeting of the African Regional Committee of the World Health Organisation held at Monrovia, Liberia, from the 31st July to 7th August, 1952

Union's Representative.—
Dr. J. J. du Pré le
Roux, Secretary for
Health and Chief
Health Officer for the
Union.

Dr. J. J. du Pré le Roux was also a member of the Union's Delegation to the undermentioned meetings convened by the Commission for Technical Co-operation in Africa South of the Sahara (C.C.T.A.):—

Fifth Session of C.C.T.A. held at Cape Town from the 28th January to the 2nd February, 1952.

C.C.T.A. Conference on Housing in Africa South of the Sahara held at Pretoria from the 17th to the 28th November, 1952.

An important development in the field of international health was the adoption by the Fourth World Health Assembly, held at Geneva in 1951, of the International Sanitary Regulations. The purpose of these regulations is to bring about a measure of uniformity in the steps taken by different countries to prevent the spread of the principal epidemic diseases by means of international travel and traffic and, more particularly, to ensure that, while adequate safeguards are permitted, the steps taken

do not exceed those which are mutually agreed upon as being necessary to meet the health requirements in the particular circumstances. The objects referred to had been achieved to a considerable degree by several international conventions to which the Union, in common with most other countries, was a signatory but the rapidly changing conditions of international travel had created a need for a revision of such agreements with a view to their being brought into line with modern public health thought and practice and to their consolidation into a single code for universal adoption. The World Health Organisation was the obvious body to undertake this work and accordingly, after long and careful deliberation, the regulations were finalized and, as previously mentioned, were adopted by the Fourth

Assembly in 1951.

The Union is a yellow fever receptive area and, due to its geographical position at the extremity of the African continent, is particularly vulnerable to this disease. Yellow fever has not as yet made its appearance in the Union and one of the Department's duties is to take all reasonable steps to ensure that it is not introduced. It was considered that the International Sanitary Regulations did not make adequate provisions for the circumstances in which the Union finds itself in this connection and accordingly we, in common with several other countries, were unable to agree to the adoption of these regulations in their entirety. The reservations to the regulations which the Union felt itself compelled to make were accordingly put forward at the Fifth World Health Assembly, held at Geneva in 1952, when it was found possible to withdraw some of them after discussions and explanations, while others were accepted by the Assembly, in some cases in a modified form. The effect of this was that the Union accepted the International Sanitary Regulations with certain reservations and thus retains the right to take the steps which are considered necessary by this Department to prevent the introduction of yellow fever into the country.

In order to put this into effect the International Sanitary Regulations Act (Act No. 38 of 1952) was passed and regulations under the act were subsequently promulgated. Previous legislation on the subject was repealed and the new act came into operation on 1st October, 1952. The administration of the new legislation has given rise to no difficulty and in fact has made very little practical difference as the measures taken by the Union in this connection have never been more than those regarded as the minimum compatable with the public safety from a health point of view.

#### (XIII)— LEGISLATION.

The following legislation sponsored by the Minister of Health was passed by Parliament during 1952:—

The Public Health Amendment Act No. 44 of 1952; The International Sanitary Regulations Act, No. 38 of 1952; and

The Post Mortem Examinations and Removal of Human Tissue Act No. 30 of 1952.

Arising out of a resolution adopted at a conference on financial relations between the Central Government, the Provinces and local authorities held in Pretoria during 1949 under the chairmanship of the Minister of Finance, a committee was appointed by the Minister of Health to investigate and make recommendations regarding financial relations in respect of health services, with particular reference, *inter alia*, to the question of the unification of all refunds payable under the Public Health Acts.

The Public Health Amendment Act No. 44 of 1952 mainly gives effect to the short term recommendations of the above committee. It provides, *inter alia*, for more generous refunds to local authorities on the approved expenditure incurred by them on services which are eligible for part-refund in terms of the Public Health Act No. 36 of 1919 and Acts Nos. 57 of 1935 and 51 of 1946 and to charitable organisations in respect of expenditure on district nursing services, the intro-

duction of a uniform rate of refund (seven-eighths) in respect of approved expenditure incurred on the relative services, except in the case of refunds on the salaries of health officers in terms of section 16 of Act No. 36 of 1919, where the refund rate remains at one-third, although the limits in respect of the total annual refund are removed, and for the forfeiture by local authorities and Provincial Administrations of any claim to refunds on the emoluments of personnel employed by them on refundable services, if their emoluments exceed those prescribed by the Minister in respect of the posts in which they are employed. This principle also applies to the emoluments of nurses employed by charitable organisations on district nursing services established under Section 14 of Act No. 57 of 1935.

Provision is also made in the Amendment Act for the payment of grants-in-aid towards the transport costs incurred by local authorities and charitable organisations in connection with district nursing services and for the reconstitution of the National Health Council with a slightly reduced membership.

The International Sanitary Regulations Act, No. 38 of 1952, provides for the enforcement in the Union, subject to certain reservations, of the International Sanitary Regulations adopted by the Fourth World Health Assembly in 1951.

The provisions of this Act are reviewed in general in Chapter XII of this report.

The Post Mortem Examinations and Removal of Human Tissues Act, No. 30 of 1952, legalises the performance by authorised medical practitioners of necessary post mortem examinations, the removal of tissue from human bodies and the safe-keeping of such tissue for therapeutic and scientific purposes, subject to certain safeguards.

# (XIV) PUBLICATIONS BY MEMBERS OF THE STAFF.

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DORMER, B. A., Chief of Division of Tuberculosis Control:—

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Horwitz, B., Medical Officer, Rietfontein Hospital:— "Two Cases of Pneumonic Plague—Recovery of One Case treated with Streptomycin". South African Medical Journal, 27th November, 1948.

KINNEAR, A. A., Senior Assistant Pathologist, Cape Town (In collaboration with Dr. E. N. Keen):-

"Oral Protein Hydrolysate in Pulmonary Tuberculosis". Am. Rev. Tuberc., Vol. 59, No. 5, May, 1949.

LE ROUX, I., Medical Officer, Westfort Leper Institution:—

"Melaatsheid". Die Kerkbode, 27th May, 1948. Loots, J. H., Superintendent, Rietfontein Hospital:—

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Weinbren, K., Radiologist attached to King George V Hospital, Durban:—

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GORDON, I. AND TURNER, R., Chief Government Pathologists, Durban and Cape Town, respectively:—

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#### (XV) STATISTICS.

#### TABLE I.—VITAL STATISTICS.

- (1) Summary of Vital Statistics of European Population. 1920–1952.
- (2) Estimated Population by Race. 1947–53.
- (3) Comparison of Birth, Death and Natural Increase Rates amongst Europeans in the Union with other Countries.
- (4) Infant Mortality Rates.—Europeans in the Union compared with other Countries.
- (5) European Infants.—Births and Deaths under one year registered, and Infantile Mortality Rate, Death Rates per 1,000 Live Births. 1919-51.
- (6) Infant Mortality. Asiatics and Mixed. 1945–51.
- (7) Maternal Mortality. Europeans. 1926–51.
- (8) Maternal Mortality. Asiatics and Mixed. 1940–51.

(9) (a) European Deaths from Puerperal Causes by Age Groups. 1946–48.

(b) European Deaths from Puerperal Causes (In accordance with the New International Classification of Causes of Death adopted by W.H.O.) 1949–51.

#### TABLE A.—EPIDEMIOLOGY (GENERAL TABLES).

#### Infectious Diseases:—

- (i) Cases notified. 1st July, 1947 to 30th June, 1948.
- (ii) Deaths. 1st July, 1947 to 30th June, 1948.
- (iii) Cases notified. 1st July, 1948 to 30th June, 1949.
- (iv) Deaths. 1st July, 1948 to 30th June, 1949.
- (v) Notified Deaths. Calendar years, 1947-51.
- (vi) Notifications of Cases and Deaths. 1st July, 1950 to 31st December, 1951.
- (vii) Notifications of Cases and Deaths. 1st January, 1952 to 31st December, 1952.

#### TABLE (II)—EPIDEMIOLOGY (INDIVIDUAL DISEASES).

- (1) Diphtheria:—
- (a) Incidence of Deaths per 100,000 European Population.
  - (b) Distribution of Cases and Deaths by Race and Age. 1st July, 1947 to 31st December, 1952.

#### (2) Leprosy:—

(a) Leper Institutions, Patients therein. 30th June, 1947 to 31st December, 1952.

(b) First Admissions, Recrudesced Cases, Discharges and Deaths. 1st July, 1947 to 31st December, 1952.

(c) Cases remaining in their own homes. 1st July, 1947 to 31st December, 1952.

#### (3) Malaria:—

(a) Huts Treated with Residual Insecticides. 1st July, 1947 to 31st December, 1952.

(b) Vectors found in Check Spraying. 1st July, 1947 to 31st December, 1952.

(c) Number of Positive Smears Examined. 1st July 1942 to 30th June, 1952.

#### (4) Plague:—

(a) Summary of Distribution of Human Plague. 1st July, 1947 to 31st December, 1952.

(b) Distribution of Human Plague. Districts Affected. 1st July, 1947 to 31st December, 1952.

#### (5) Poliomyelitis:—

- (a) Monthly Incidence of Reported Cases by Race. 1st July, 1947 to 31st December, 1952.
- (b) Number of Cases notified and their Distribution. 1st July, 1933 to 31st December, 1952.

(c) Notifications and Deaths by Race. 1st January, 1952 to 31st December, 1952.

(d) Distribution of Cases and Deaths by Race and Age. 1st January, 1952 to 31st December, 1952.

(e) Distribution of Cases and Deaths by Race and Area. 1st January, 1952 to 31st December, 1952.

(6) Rabies.—Distribution of Human Contacts. 1st July, 1949 to 31st December, 1952.

(7) Smallpox.—Provincial Incidence of Cases. 1st July, 1945 to 31st December, 1952.

(8) Tuberculosis. Deaths (all forms)—by Race, Sex and Age. 1945–51.

(9) Typhoid Fever. Distribution of Cases and Deaths. 1st July, 1947 to 31st December, 1952.

(10) *Typhus*:—

- (a) Monthly Incidence according to Provinces. 1st July, 1946 to 31st December, 1952.
- (b) Number of Cases in the Union. 1st July, 1932 to 31st December, 1952.
- (c) Yearly Incidence. 1st July, 1946 to 31st December, 1952.

## TABLE III.—HEALTH CONTROL AT SEAPORTS AND AIRPORTS.

(1) Ports of the Union: Health Measures. 1st July, 1947 to 31st December, 1952.

(2) Monthly Totals of Aircraft arriving from outside the Union at Sanitary Airports. 1st July, 1947 to 31st December, 1952.

(3) Annual Totals of Aircraft arriving from outside the Union at Durban Airport. 1st July, 1949 to 31st December, 1952.

## TABLE IV.—NURSING, MATERNITY AND CHILD WELFARE SERVICES.

- (1) District Nursing Services, Part-refunds paid. 1947-52.
- (2) Summary of Work done by D.C.H.O. Regions. 1st January, 1952 to 31st December, 1952.

#### TABLE V.—LABORATORIES AND BIOLOGICAL CONTROL.

(1) Analysis and Examinations. 1st July, 1947 to 31st December, 1952.

(2) Number of Examinations performed. 1st July, 1947 to 31st December, 1952.

(3) Nature of Examinations performed. 1st July, 1947 to 31st December, 1952.

Government Vaccine Institute, Cape.

(4) Work carried out. 1st July, 1947 to 31st December 1952.

(5) Lymph issue free in the Union. 1st July, 1947 to 31st December, 1952.

(6) Sales outside the Union. 1st January, 1952 to 31st December, 1952.

#### TABLE VI.—HEALTH CENTRES. Summary of work done.

## TABLE VII.—STATUTORY INSPECTION SERVICES.

Food, Drugs and Disinfectants Act No. 13 of 1929.

(1) Samples taken for Examination or Analysis. 1st July, 1947 to 31st December, 1952.

Medical, Dental and Pharmacy Act No. 13 of 1928.

(2) Prosecutions and Convictions under laws relating to Habit-forming Drugs. 1st July, 1947 to 31st December, 1952.

(3) Licences and Permits issued under the Therapeutic Substances Regulations. 1st July, 1947 to 31st December, 1952.

(4) Examinations carried out under the Therapeutic Substances Regulations 1st July, 1947 to 31st December, 1952.

(5) Narcotic Drugs imported into the Union of South Africa. 1948-52.

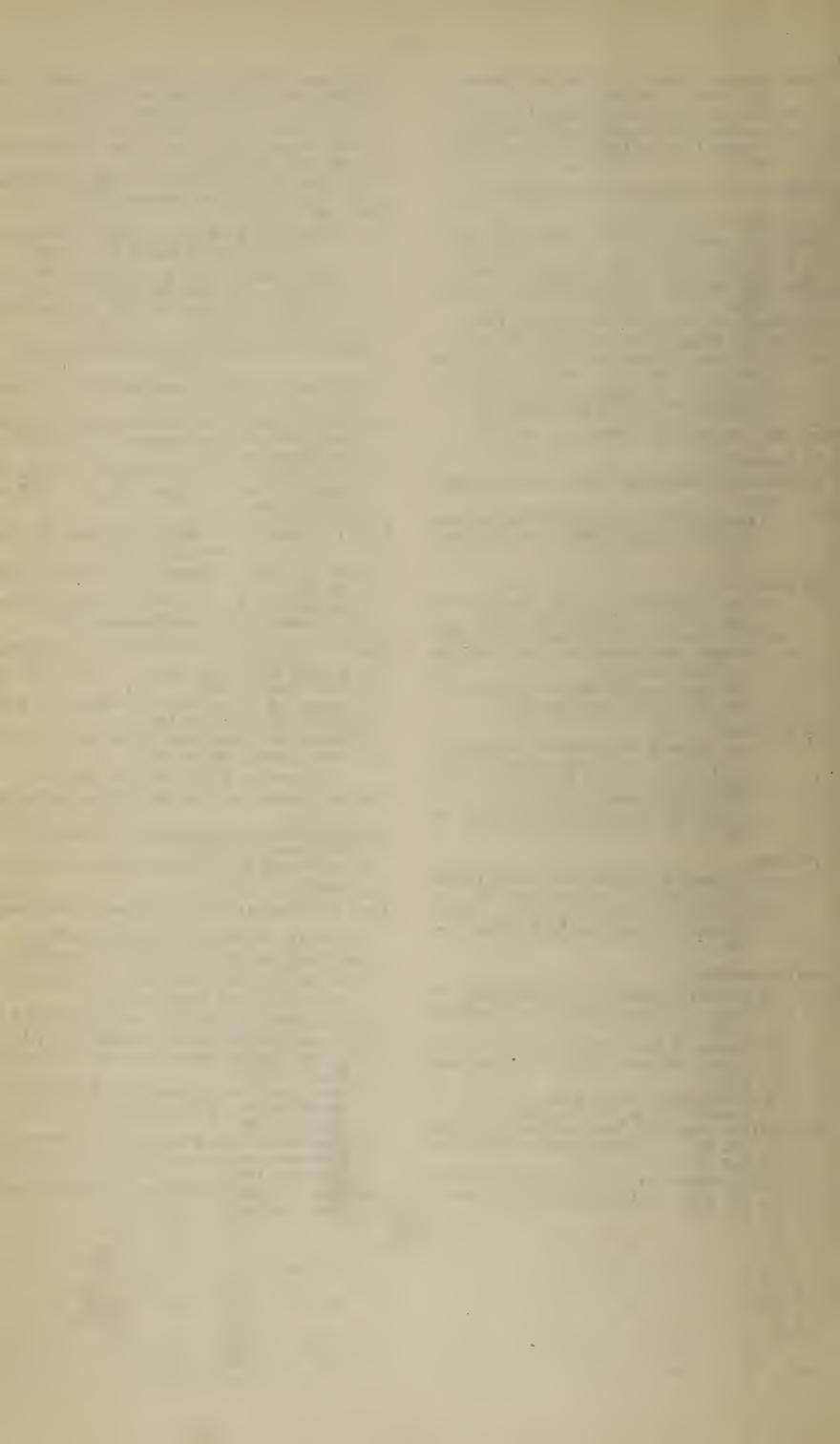


Table 1 (1).—Union of South Africa—Summary of Vital Statistics of European Population, 1920-52.

Calendar Year. European Population (estimated).	European	Birth Rate per 1,000 of Population.		DEATH RATE PER 1,000 OF P		N	DEATH RATE PER 100,000 OF POPULATION FROM TUBERCULOSIS (ALL FORMS).‡									Percentage of Total Deaths, the Cause of	Infantile Mo Mortality Rate (I (Deaths of M	Maternal Mortality Rate (Deaths of Mothers in	Survival Rate of Rate of Natural Increase							
	Population		per 1,000 of	per 1,000 of	per 1,000 of	per 1,000 of	per 1,000 of Population.	per 1,000 of Population.	per 1,000 of Population.	per 1,000 of Population.	Actual or Crude.	Diseases of Heart and Circulatory	Pneumonia and	Cancer.	Cape I	Province.	Tran	svaal.	Orange F	ree State.	N	atal.	Union.	which was Medically Certified.	1 nfants under 1 year per 1,000 live births Registered).	connection with Pregnancy or Childbirth per 1,000 Live Births
			Crude.	Crude.	Crude.	System.	Bronchitis.		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			rtogistoros).	Registered).	or repaidment,					
1920	1,499,911 1,519,488† 1,556,241 1,579,733 1,610,774 1,637,472 1,676,660† 1,708,955 1,738,937 1,767,719 1,797,900 1,829,300 1,859,400 1,890,300 1,914,700 1,973,700 2,008,700 2,043,700 2,043,700 2,043,700 2,043,700 2,116,500 2,152,700 2,188,200 2,230,000 2,265,000 2,300,000 2,372,690† 2,434,000 2,505,000 2,567,000 2,610,000 2,650,000 2,650,000 2,650,000 2,650,000 2,695,000	28·97 28·44 27·52 26·70 26·29 26·51 26·16 25·95 25·77 26·15 26·44 25·38 24·17 23·55 23·44 24·18 24·21 24·90 25·01 25·29 25·29 24·94 25·18 25·94 26·63 25·48 26·92 27·23 26·54 25·91 25·07 25·92	11·09 10·41 9·48 9·77 9·62 9·39 9·59 9·73 10·15 9·51 9·69 9·37 9·97 9·35 9·68 10·45 9·57 10·08 9·48 9·40 9·42 9·47 9·35 9·53 9·35 9·58 8·60 8·82 8·62	95·67* 102·91 97·99 108·50 123·92 128·86 127·21 122·76 133·53 127·11 132·33 131·53 137·52 142·52 156·21 169·58 154·38 172·97 153·55 170·42 190·18 197·61 199·69 211·92 214·83 236·10 211·64 219·06 241·90 207·01 202·41 223·63 §	113·87* 136·15 127·24 120·72 123·79 97·04 113·44 110·42 127·52 104·04 112·87 103·75 113·75 100·30 94·53 131·98 106·19 113·62 102·53 90·05 89·93 86·14 81·97 92·23 84·78 85·65 78·15 77·04 83·80 77·52 72·45 70·60 §	58·87* 69·09 70·88 78·94 76·36 72·86 71·18 73·20 77·72 77·44 82·62 85·55 89·06 95·33 92·39 95·76 97·28 106·57 103·44 104·75 102·80 109·33 109·98 111·96 112·59 107·52 107·80 112·70 115·31 118·35 116·07 §	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$2.43 \$2.82 62.14 57.36 59.87 56.51 51.63 50.58 55.75 54.55 54.40 50.23 56.52 44.72 50.17 51.75 43.81 50.68 43.83 44.95 45.11 51.90 43.53 43.94 40.63 41.80 34.27 34.90 26.48 §	74·45 84·54 74·27 95·54 78·78 85·08 72·48 73·84 64·26 59·19 52·21 52·30 49·18 45·28 41·72 42·42 43·05 37·74 38·11 38·20 36·52 31·87 34·70 28·73 29·95 28·00 37·46 33·89 15·60 §	11.05 11	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	17·17 22·25 12·59 16·22 12·98 15·74 17·47 6·87 11·92 15·83 6·90 12·77 26·16 9·08 15·14 11·10 10·09 12·11 11·11 7·07 13·13 5·05 7·07 8·00 10·39 16·90 12·96 1·82 6·19 §	41·62 50·93 73·89 49·23 71·95 54·99 44·58 51·74 54·26 58·63 46·86 50·31 43·39 45·03 44·56 60·54 52·79 57·29 48·62 54·05 46·90 55·65 46·15 57·63 59·84 44·90 48·48 29·63 32·85	40·45 36·38 40·51 39·85 28·73 25·55 22·56 31·51 26·35 24·66 19·63 26·97 28·72 15·69 27·78 28·28 17·87 18·55 25·45 24·11 26·32 12·07 22·88 24·17 21·14 26·00 19·70 11·85 18·84 §	45.93* 58.26 47.74 46.46 51.59 52.70 53.41 50.50 50.95 45.37 46.78 44.22 42.33 40.86 39.54 40.43 34.40 36.40 38.34 36.19 35.12 34.26 36.19 33.16 34.17 32.46 32.57 31.75 30.81 26.64 24.48 21.41 §	79·78 80·76 82·96 82·97 84·74 86·45 87·76 89·93 89·93 90·19 91·15 90·46 90·84 91·45 91·91 92·55 92·88 93·17 94·20 94·32 94·75 94·83 95·25 95·03 95·59 96·02 96·87 97·50 97·50 97·90	90·07 77·09 72·91 74·42 73·73 68·39 64·82 70·62 70·49 64·22 66·84 63·07 68·57 61·01 60·79 62·81 59·06 56·57 51·69 49·48 50·02 50·93 47·52 45·60 42·53 40·33 35·90 34·39 36·63 35·74 33·52 34·64	4·10* 4·94 5·21 5·22 4·75 5·62 4·56 4·80 4·98 5·26 5·26 4·70 5·31 4·81 5·99 4·73 5·10 4·38 3·69 3·61 3·37 2·49 2·83 2·85 2·20 2·10 1·77 1·37 1·50 1·13 0·95 1·12 §	17·88 18·03 18·04 16·93 16·67 17·12 16·57 16·22 15·62 16·64 16·75 16·01 14·20 14·20 13·76 13·72 14·64 14·81 15·53 15·88 15·87 15·47 15·83 16·41 17·30 16·16 18·27 18·60 17·60 17·08 16·39 16·25 17·30							

<sup>\*</sup> Medically certified deaths only. Rates for subsequent years calculated on the total deaths registered.
† Actual (per census).
‡ Includes miner's phthisis combined with pulmonary tuberculosis.
§ Not yet available.
¶ Not available.
¶ Preliminary figures.



TABLE I (2).—ESTIMATED POPULATION BY RACE (AS AT 30TH JUNE, EACH YEAR).

Drawing	TOVING:	CapeTransvaalOrange Free State	Union	Cape	UNION	Cape	Union	CapoTransvaalOrange Free State	Union	Cape Natal Transvaal	Union	Cape Natal Transvaal	Union	Cape Natal Transvaal Orange Free State	Union
	Malc.	441,000 122,000 557,000 105,000	1,225,000	449,000 127,000 575,000 109,000	1,260,000	456,000 132,000 590,000 112,000	1,290,000	461,000 135,000 599,000 114,000	1,309,000	465,000 137,000 609,000 116,000	1,327,000	470,000 140,000 620,000 119,000	1,349,000	477,000 145,000 635,000 121,000	1,378,000
EUROPEAN.	Female.	444,000 123,000 539,000 103,000	1,209,000	454,000 128,000 558,000 105,000	1,245,000	461,000 132,000 576,000 108,000	1,277,000	467,000 135,000 589,000 110,000	1,301,000	472,000 138,000 600,000 113,000	1,323,000	478,000 141,000 613,000 114,000	1,346,000	485,000 145,000 629,000 117,000	1,376,000
	Total.	885,000 245,000 1,096,000 208,000	2,434,000	903,000 255,000 1,133,000 214,000	2,505,000	917,000 264,000 1,166,000 220,000	2,567,000	928,000 270,000 1,188,000 224,000	2,610,000	937,000 275,000 1,209,000 229,000	2,650,000	948,000 281,000 1,233,000 233,000	2,695,000	962,000 290,000 1,264,000 238,000	2,754,000
	Malc.	1,085,000 835,000 1,820,000 341,000	4,081,000	1,100,000 846,000 1,851,000 356,000	4,153,000	1,115,000 856,000 1,884,000 370,000	3,225,000	1,130,000 867,000 1,915,000 385,000	4,297,000	1,145,000 877,000 1,948,000 399,000	4,369,000	1,160,000 887,000 1,980,000 414,000	4,441,000	1,175,000 898,000 2,012,000 429,000	4,514,000
NATIVE.	Female.	1,287,000 896,000 1,384,000 348,000	3,915,000	1,301,000 904,000 1,423,000 356,000	3,984,000	1,315,000 913,000 1,460,000 364,000	4,052,000	1,329,000 921,000 1,499,000 372,000	4,121,000	1,343,000 930,000 1,537,000 380,000	4,190,000	1,358,000 938,000 1,575,000 388,000	4,259,000	1,371,000 947,000 1,613,000 396,000	4,327,000
	Total.	2,372,000 1,731,000 3,204,000 689,000	7,996,000	2,401,000 1,750,000 3,274,000 712,000	8,137,000	2,430,000 1,769,000 3,344,000 734,000	8,277,000	2,459,000 1,788,000 3,414,000 757,000	8,418,000	2,488,000 1,807,000 3,485,000 779,000	8,559,000	2,518,000 1,825,000 3,555,000 802,000	8,700,000	2,546,000 1,845,000 3,625,000 825,000	8,841,000
	Male.	9,000	157,000	9,000 133,000 23,000	165,000	9,000 140,000 24,000	173,000	10,000 147,000 25,000	182,000	10,000 154,000 26,000	190,000	10,000 158,000 27,000	195,000	10,000 162,000 27,000	199,000
ASIATIC.	Female.	7,000 120,000 18,000	145,000	7,000 126,000 20,000	153,000	8,000 132,000 21,000	161,000	7,000	169,000	8,000 146,000 23,000	177,000	8,000 151,000 24,000	183,000	8,000 155,000 25,000	188,000
	Tetal.	16,000 246,000 40,000	302,000	16,000 259,000 43,000	318,000	17,000 272,000 45,000	334,000	17,000 287,000 47,000	351,000	18,000 300,000 49,000	367,000	18,000 309,000 51,000	378,000	18,000 317,000 52,000	387,000
	Male.	431,000 14,000 32,000 7,000	484,000	446,000 14,000 33,000 7,000	200,000	461,000 14,000 35,000 7,000	517,000	475,000 15,000 37,000 7,000	534,000	492,000 16,000 38,000 8,000	554,000	506,000 16,000 39,000 8,000	269,000	519,000 16,000 41,000 8,000	584,000
COLOURED.	Female.	430,000 13,000 31,000 7,000	481,000	444,000 14,000 33,000 7,000	498,000	460,000 15,000 34,000 7,000	516,000	476,000 15,000 36,000 7,000	534,000	492,000 16,000 38,000 7,000	553,000	506,000 17,000 40,000 7,000	570,000	521,000 18,000 41,000 7,000	587,000
	Total.	861,000 27,000 63,000 14,000	965,000	890,000 28,000 66,000 14,000	000,866	921,000 29,000 69,000 14,000	1,033,000	951,000 30,000 73,000 14,000	1,068,000	984,000 32,000 76,000 15,000	1,107,000	1,012,000 33,000 79,000 15,000	1,139,000	1,040,000 34,000 82,000 15,000	1,171,000

TABLE I (3).—Comparison of Birth, Death and Natural Increase Rate among Europeans in the Union with other Countries.—Average Rates for Three-yearly Periods (Based on Latest available Information).

Countries.	Birth Rate.	Death Rate.	Natural Increase.
Union of South Africa. Holland. Canada. Portugal. New Zealand. Italy. Australia Germany. United States of America. England and Wales. France.	25·4	8·7	16·7
	27·7	8·0	19·7
	27·5	9·4	18·1
	25·0	13·6	11·4
	25·7	9·4	16·3
	22·0	11·3	10·7
	23·1	9·8	13·3
	16·8	12·3	4·5
	27·9	9·9	18·0
	19·2	11·8	7·4
	20·8	12·9	7·9

Table I (4).—Infantile Mortality Rates.—Europeans in the Union compared with other Countries. Average Rates for Three-yearly Periods (based on latest available information).

New Zealand	28	
Holland		
Australia		
Union of South Africa		
England and Wales		
Canada		
Germany		
France	61	
Belgium	70	
Italy	80	
Lithuania		
Portugal		

TABLE I (5).—EUROPEAN INFANTS—BIRTHS AND DEATHS UNDER ONE YEAR REGISTERED AND INFANTILE MORTALITY RATE, DEATH RATE PER 1,000 LIVE BIRTHS, 1919-51.

	Death- rate per 1,000 Births.	81.81 90.07 77.09 77.09 74.42 73.73 64.22 66.63 66.63 67.01 60.79 60.79 60.79 60.79 60.79 60.79 60.79 60.79 60.79 83.50
Union.	Deaths of European Children under One Year.	2,250 2,250
	Total European Births Regis- tered.	39,724 43,445 42,832 42,832 42,832 42,832 44,347 44,347 44,347 44,347 44,534 44,534 44,534 44,534 44,534 64,060 66,301 66,523 66,258
STATE.	Death- rate per 1,000 Births.	80.81 71.67 71.67 72.56 72.56 73.12 88.97 88 88 88 88 88 88 88 88 88 88 88 88 88
ORANGE FREE ST	Deaths of European Children under One Year.	382 448 379 379 379 382 382 382 382 382 382 382 382 382 382
ORAN	Total European Births Regis- tered.	4,4,5,4,6,5,228 4,996 4,996 5,288 6,937 7,104 6,937 6,933 6,937 6,937 6,937 6,937 6,937 6,937 6,937 6,937 6,947
	Death- rate per 1,000 Births.	86.45 93.99 86.45 76.50 76
TRANSVAAL.	Deaths of European Children under One Year.	1,326 1,576 1,576 1,292 1,261 1,111 1,059 1,386
	Total Ruropean Births Regis- tered.	15,338 16,582 16,582 16,582 16,370 15,619 15,287 16,304 17,050 17,050 17,040 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,733 18,734 10,050 11,090 12,040 13,040 132,049 33,343 33,094 32,963
	Death- rate per 1,000 Births.	65.64 60.24 60.24 61.01 60.24 61.01 60.24 60
NATAL.	Deaths of European Children under One Year.	235 235 235 203 180 177 177 177 187 187 189 189 189 189 189 189 189 189 189 189
	Total European Births Regis- tered.	2,910 3,3,256 3,3,256 3,3,229 3,3,229 3,3,229 3,3,229 3,3,229 3,3,229 3,3,229 3,3,229 3,3,441 3,441
	Death- rate per 1,000 Births.	80.66 89.77 76.51 70.91 73.95 73.95 69.19 73.12 69.75 68.37 61.50 68.37 61.50 68.37 61.50 68.37 61.50 68.37 61.50 61.50 68.37 61.50 68.37 61.50 61.50 63.37 61.63 63.37 61.63 63.37 64.99 65.99 67.90 67.90
CAPE.	Deaths of European Children under One Year.	1,351 1,554 1,294 1,294 1,295 1,295 1,196 1,196 1,016 1,012 1,012 1,012 1,012 1,012 1,012 1,012 1,013
	Total Ruropean Births Regis- tered.	16,749 18,425 18,625 18,248 18,248 18,237 18,032 19,008 19,008 19,180 19,008 19,008 19,022 19,022 18,727 18,727 18,727 19,022 19,02 19,
	Year.	1919. 1920. 1921. 1923. 1924. 1926. 1928. 1939. 1931. 1933. 1934. 1934. 1944. 1944. 1944. 1945. 1946.

TABLE I (6).—INFANTILE MORTALITY—ASIATICS AND MIXED.

		Asiatics.		MIXED AND OTHER COLOURED.					
Province.	Live Births.	Infantile Deaths.	Rate per 1,000 Births.	Live Births.	Infantile Deaths.	Rate per 1,000 Births.			
1945.	395	41	103 · 80	27.092	5 621	149.15			
Cape. Natal. Transvaal. Orange Free State.	9,003 1,541	730 131	81·84 85·01	37,083 1,009 2,002 351	5,631 109 299 68	108·03 149·35 193·73			
Union	10,939	902	82.46	40,445	6,107	151.00			
1946. Cape Natal Transvaal. Orange Free State	395 8,630 1,628	29 690 139	73·42 79·95 85·38	38,378 1,033 2,151 300	4,884 107 285 49	127·26 103·58 132·50 163·33			
Union	10,654	858	80.53	41,862	5,325	127 · 20			
1947. Cape Natal Transvaal Orange Free State	467 9,780 1,839	39 710 141	83·51 72·60 76·67	40,262 1,087 2,315 345	5,168 97 315 74	128·36 89·24 136·07 214·49			
Union	12,086	890	73.64	44,009	5,654	128 · 47			
1948. Cape Natal Transvaal. Orange Free State.	426 10,109 1,871	41 763 153	96·24 75·48 81·77	43,003 1,157 2,529 339	5,650 111 374 59	131·39 95·94 147·88 174·04			
Union	12,406	957	77 · 14	47,028	6,194	131.71			
1949. Cape. Natal. Transvaal. Orange Free State.	512 9,905 1,944 —	38 632 171	74 ·22 63·80 87·96	44,803 1,227 2,717 430	5,460 98 354 74	121 · 87 79 · 87 130 · 29 172 · 09			
Union	12,361	841	75 · 33	49,177	5,986	126.03			
1950. Cape Natal Transvaal Orange Free State	538 10,855 1,991	38 737 142	70·63 67·80 71·32	45,736 1,180 2,799 412	6,187 111 340 91	135·25 94·07 125·04 220·87			
Union	13,384	917	69.92	50,127	6,729	134.04			
					, , , ,				
1951. Cape. Natal. Fransvaal. Orange Free State.	582 10,461 1,971	44 642 128	75·60 61·37 64·94	48,289 1,361 2,965 448	5,979 116 427 94	123·82 85·23 144·01 209·82			
Union	13,014	814.	62.55	53,063	6,616	124.68			

TABLE I (7).—MATERNAL MORTALITY—EUROPEANS.

1			DEATHS DUE TO	PUERPERAL CA	USES.	
Year.	Live Births	Nu	mber.	Rat	es per 1,000 Live B	irths.
	Registered.	Puerperal Sepsis.	Other Puerperal Causes.	Puerperal Sepsis.	Other Puerperal Causes.	Total Puerperal Mortality.
1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1944. 1945. 1946. 1947. 1948. 1949. 1950.	43,876 44,347 44,809 46,219 47,536 46,423 44,944 44,519 44,878 47,717 48,630 50,878 52,065 53,517 54,439 54,569 56,143 58,765 61,253 59,489 64,060 66,301 66,477 66,523 65,492 66,258	88 101 102 140 119 116 126 113 121 119 116 99 78 69 67 46 60 45 42 26 24 24 18 13 14	112 112 121 103 131 102 113 101 148 107 132 124 114 124 116 90 99 122 93 99 122 93 99 89 67 79 62 48 66	2·06 2·28 2·28 3·03 2·50 2·50 2·80 2·54 2·69 2·49 2·39 1·94 1·50 1·29 1·23 0·84 1·07 0·77 0·68 0·44 0·38 0·36 0·27 0·20 0·21 0·12	2·50 2·53 2·70 2·23 2·76 2·20 2·51 2·27 3·30 2·24 2·71 2·44 2·19 2·32 2·13 1·65 1·76 2·08 1·52 1·66 1·39 1·01 1·19 0·93 0·73 1·00	4·56 4·81 4·98 5·25 5·26 4·70 5·31 4·81 5·99 4·73 5·10 4·38 3·69 3·61 3·36 2·49 2·83 2·85 2·20 2·10 1·77 1·37 1·46 1·13 0·94 1·12

TABLE I (8).—MATERNAL MORTALITY—ASIATICS AND MIXED UNION.

			DEATHS DUE T	O PUERPERAL CAU	JSES.	
Year.	Live Births	Nun	iber.	Rate	es per 1,000 Live B	irths.
	Registered.	Puerperal Sepsis.	Other Puerperal Causes.	Puerperal Sepsis.	Other Puerperal Causes.	Total Puerperal Mortality.
			Asiatics.			
1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951.	9,531 9,841 10,262 10,893 11,092 10,939 10,654 12,086 12,406 13,361 13,384 13,014	16 16 26 26 23 13 10 7 9 5 6	37 44 40 40 41 44 37 29 23 15 37 33	1.68 1.63 2.53 2.39 2.07 1.19 0.94 0.58 0.73 0.37 0.45 0.23	3·88 4·47 3·90 3·67 3·70 4·02 3·47 2·40 1·85 1·12 2·76 2·54	5·56 6·10 6·43 6·06 5·77 5·21 4·41 2·98 2·58 1·49 3·21 2·77
	Registered.  9,531 9,841 10,262 10,893 11,092 10,939 10,654 12,086 12,406 13,361 13,384 13,014   N  38,366 38,412 36,631 37,697 38,625 40,445 41,862 44,009 47,028	MIXED ANI	OTHER COLOU	RED.		
1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951.	38,412 36,631 37,697 38,625 40,445 41,862 44,009	81 88 57 64 55 38 41 36 27 19 18	129 121 111 128 120 134 91 87 103 119 115	2·11 2·29 1·56 1·70 1·42 0·94 0·98 0·82 0·57 0·39 0·36 0·08	3·36 3·15 3·03 3·40 3·11 3·31 2·17 1·98 2·19 2·42 2·29 2·41	5·47 5·44 4·59 5·10 4·53 4·25 3·15 2·80 2·76 2·81 2·65 2·49

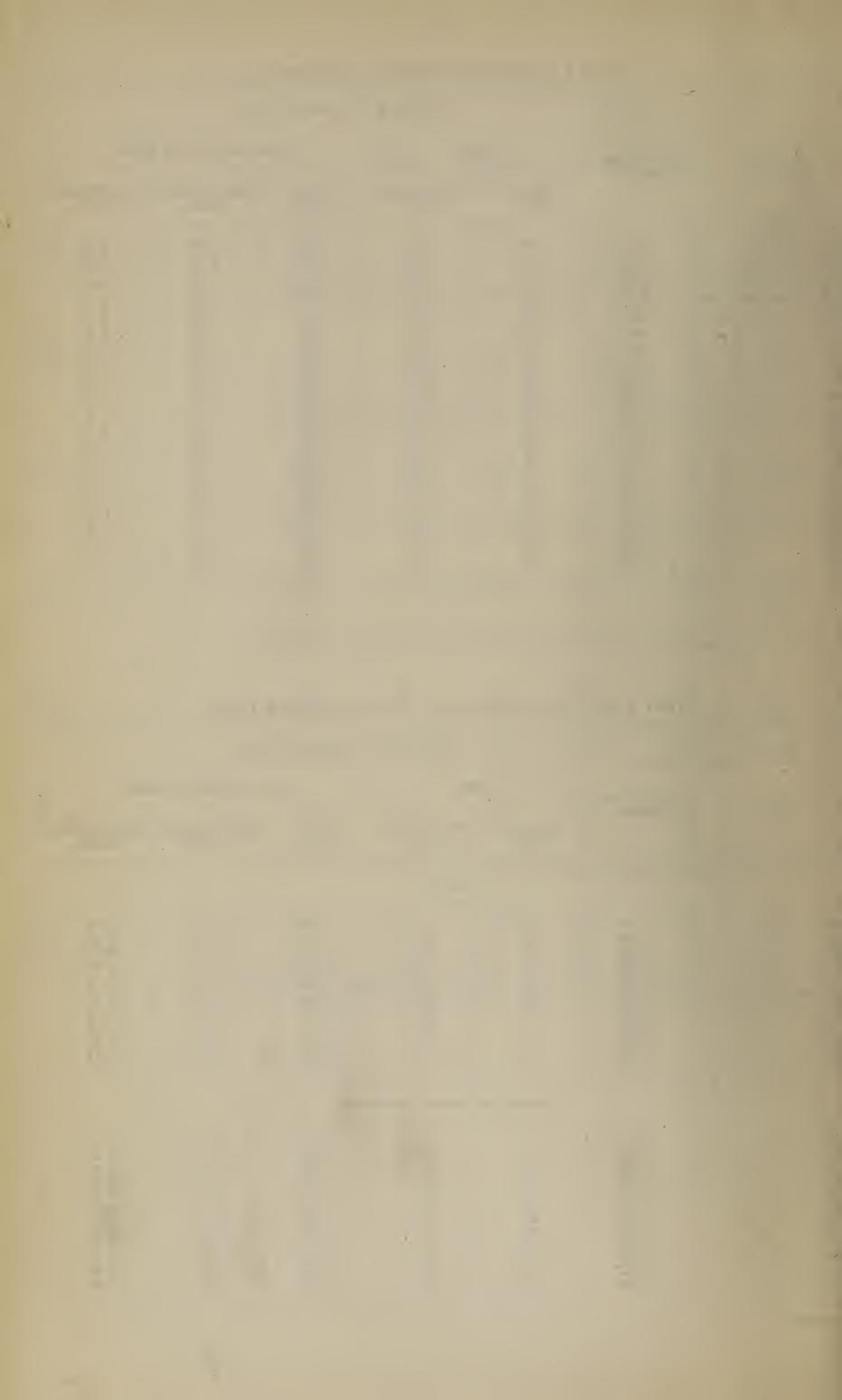


TABLE I (9) (a) EUROPEAN DEATHS FROM PUERPERAL CAUSES BY AGE GROUPS.

				19	46.							194	47.		and the same of th					19	48.			
Causes.	All Ages.	15–19.	20–24.	25–29.	30–34.	35–39.	40-44.	45 and Over.	All Ages.	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45 and Over.	All Ages.	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45 and Over.
Post Abortive Infection.  Spontaneous, Therapeutic or Unspecified Origin.  Abortion induced for reasons other than Therapeutic	7 1	_	1	_1	2	3 1	_	_	6	_	2	1 1	1 1	2 2		=	6	1	2	1	1	1	=	_
Aborton without Mention of Septic Condition.  Spontaneous, Therapeutic or of Unspecified Origin.  Abortion induced for reasons other than Therapeutic.  Ectopic Gestation.	3 1 12	=	<u>_</u>	$\frac{1}{1}$	1 5	1 1 3	<u>-</u> 1	Ξ	<u> </u>	_		 1 2	<u></u>	<u>-</u> 1	<u>-</u>	_	3 1 10		<u>-</u> 1	<u>-</u>	2 4	$\frac{1}{4}$	=	<u></u>
Haemorrhage and Diseases of Pregnancy.  Haemorrhage from Placenta Praevia  Haemorrhage from Premature Separation of Placenta and other Accidental Haemorrhage (except Abortion).  Other and Unspecified Haemorrhage Eclampsia.  Albuminuria and Nephritis.  Acute Yellow Atrophy of the Liver.  Other Toxaemias.	10 1 2	-   -   1   -   -				1 — 1 3 —	1 1 1		2  5 8 3 					2 — 4 —		_ _ _ 1	5 — 17 . 1	_ _ _ _		2 — — —	1 - 2 1 - 1	_ _ _ 6 _ _ 3	1 	1   
Other Diseases and Accidents  Haemorrhage and Diseases of Childbirth and the Puerperium.  Haemorrhage from Placenta Praevia.  Haemorrhage from Premature Separation of Placenta.  Other Haemorrhages during Childbirth.  Other Haemorrhage after Childbirth.  General of Local Puerperal Infection (including Puerperal Tetanus) with or without Mention of Pyelitis.  Thrombo Phlebitis.  Embolism and Sudden Death.  Eclampsia.  Albuminuria and Nephritis.  Acute Yellow Atrophy of the Liver.  Other Toxaemias.  Other Accidents.	1 - - - - - - - - - - - - - - - - - - -		$ \begin{array}{c c}  & 1 \\  & - \\  & 2 \\  & 3 \\  & 1 \\  & 2 \\  & - \\  & 4 \end{array} $	2 2 	1 2 ———————————————————————————————————	1 1  1 2 1 1   6			3 -1 3 9 -3 5 -1 -22		1 ————————————————————————————————————	1  2  2  1	1 - 1 1 - - - - 5	3 1 1 1 1 1 - 6	1	1   1   1   1   1   1   1   1   1   1	1 1 14 4 8 2 —	- - 1 - - - - 1	- - - 6 2 - - - - 3	1 1 1 1 - - 1 - 1	1 1 1 5 1 -	3 - - 3 1 - 2 - - - 4		
Other or Unspecified Diseases		2	18	25	33	27	9		91	2	11	20	15	26	12	2	96	. 3	21	10	25	26	9	



TABLE I (9) (b).—EUROPEAN DEATHS REGISTERED BY AGE GROUPS.

					Year	1949.			
		15.	20.	25.	30.	35.	40.	45.	Total All Ages.
XI.—Deliveries and Complications Puerper									
641 Other infections of genito-urinary (642 Tozaemias of pregnancy	nancy tract during pregnancy tus in uterus					- 4 1 1 2 -			— 17 1 2 5 —
649 Pregnancy associated with other co	oregnancyonditions	1	7	_ 1					
651 Abortion with sepsis	50–652). s or toxaemia mention of sepsis	=			1 2 — 3	1 - - 1			2 4 — 6
671 Delivery complicated by retained p 672 Delivery complicated by other pos 673 Delivery complicated by abnormalicated by disproports 674 Delivery complicated by disproports 675 Delivery complicated by prolonged 676 Delivery with laceration of perineum 677 Delivery with other trauma	raevia or antepartum haemorrhage blacenta tpartum haemorrhage ity of bony pelvis tion or malposition of foetus labour of other origin , without mention of other laceration. of childbirth	- - - - - - 1		1 6 2	1 1 4 2	1 3 - - 1	3 1 2 — — — — 1		6 2 18 — — — 1 10
Complication of the Pu 680 Puerperal urinary infection, withou 681 Sepsis of childbirth and the puerpe 682 Puerperal phlebitis and thrombosis 683 Pyrexia of unknown origin during 684 Puerperal pulmonary embolism 685 Puerperal eclampsia 686 Other forms of puerperal toxaemia 687 Cerebral haemorrhage in the puerpe 688 Other and unspecified complication	terperium (680–689).  In other sepsis  In the puerperium  Derium  Derium  Desium  De	1    		9 — — 3 —	8 — — — — — —	<u></u>	7 ————————————————————————————————————		
	0–689	4	13	14	18	14	10	2	75

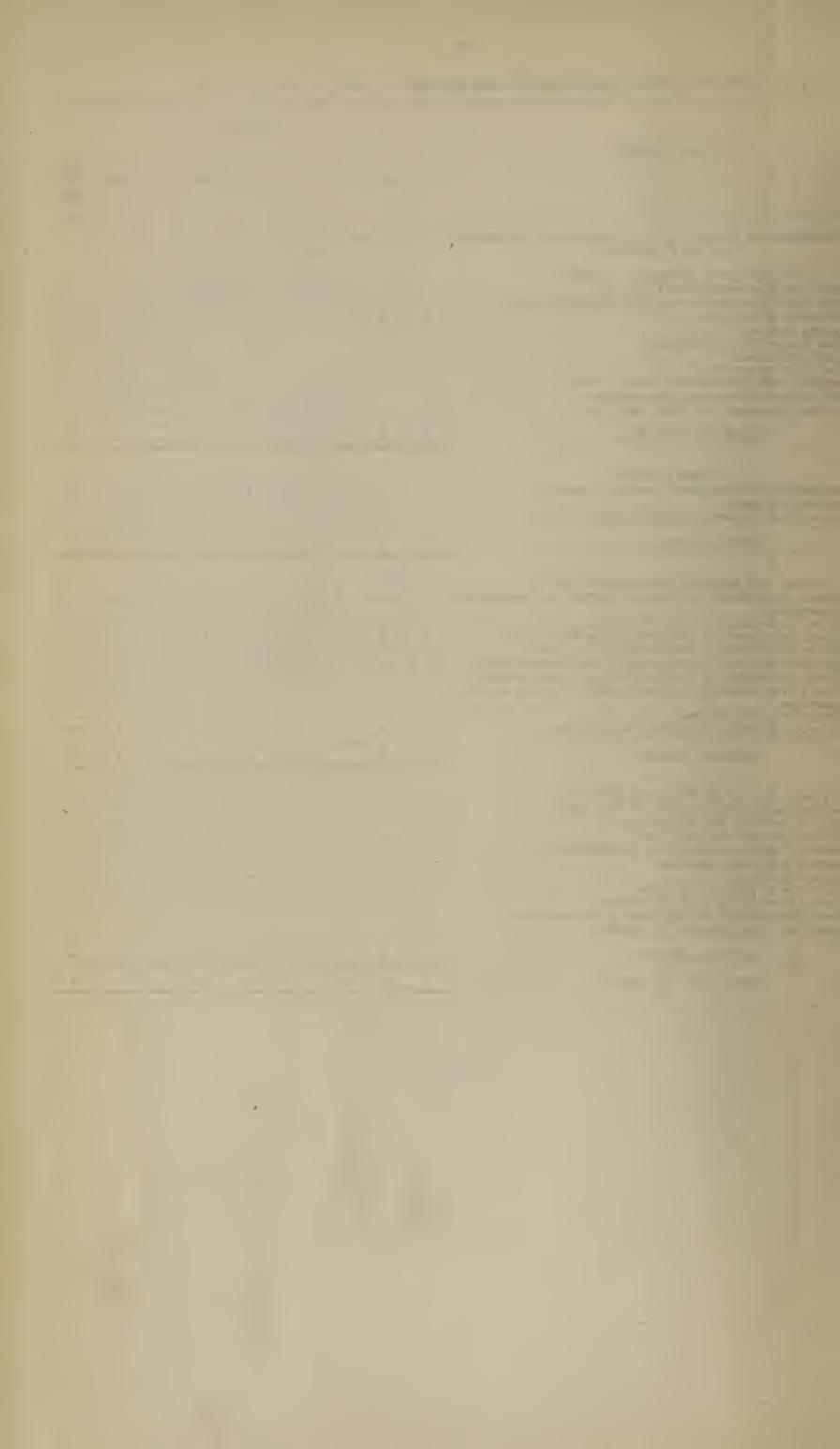
These tables are in accordance with the new international classification of causes of deaths adopted by the World Health Organisation.

## Table I (9) (b).—European Deaths Registered by Age Groups (continued).

===					YEAR	1950.			
		15.	20.	25.	30.	35.	40.	45.	Total All Ages.
XI	.—Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium.								
640 641 642 643 644 645 646 647 648 649	Complications of Pregnancy (640-649).  Pyelitis and pyelonephritis of pregnancy. Other infections of genito-urinary tract during pregnancy.  Tozaemias of pregnancy.  Placenta praevia. Other haemorrhage of pregnancy. Ectopic pregnancy. Anaemia of pregnancy.  Pregnancy with malposition of foetus in uterus. Other complications arising from pregnancy.  Pregnancy associated with other conditions.  Sub-Total, 640-649.					1 1 1 - - - - 4		\	1 9 1 1 3 - - - - 15
650 651 652	Abortion (650–652).  Abortion without mention of sepsis or toxaemia		1 1 -	<u>-</u>	<u>-</u>	3 —	<u>2</u> _		6 2 1
2.	Sub-Total, 650-652	1			1	3	2		9
671 672 673 674	Delivery with Specified Complication (670-678).  Delivery complicated by placenta praevia or antepartum haemorrhage.  Delivery complicated by retained placenta  Delivery complicated by other postpartum haemorrhage  Delivery complicated by abnormality of bony pelvis  Delivery complicated by disproportion or malposition of foetus  Delivery complicated by prolonged labour of other origin  Delivery with laceration of perineum, without mention of other laceration.  Delivery with other trauma  Delivery with other complications of childbirth	- 1 - - - 1	1 2 - - - 1			1 2 - - - - 5	1 - - - - 3		2 10   16
	SUB-TOTAL, 670-678								
680 681 682 683 684 685 686 687 688	Complication of the Puerperium (680–689).  Puerperal urinary infection, without other sepsis.  Sepsis of childbirth and the puerperium.  Puerperal phlebitis and thrombosis.  Pyrexia of unknown origin during the puerperium.  Puerperal pulmonary embolism.  Puerperal eclampsia.  Other forms of puerperal toxaemia.  Cerebral haemorrhage in the puerperium.  Other and unspecified complications of the puerperium.  Mastitis and other disorders of lactation.				1 - - 1 1 - -				2 - 3 3 1 - 1
	SUB-TOTAL, 680–689		12	<u> </u>	11	18	8	=	62
	TOTAL CLASS XI, 640-689		12			10	0		02

TABLE I (9) (b).—EUROPEAN DEATHS REGISTERED BY AGE GROUPS.

					Yı	EAR 195	51.			
	Cause of Death.	15.	20.	25.	30.	35.	40.	45.	50.	Total All Ages.
XI.	—Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium.									
640 641 642 643 644 645 646 647 648 649	Complications of Pregnancy (640–649).  Pyelitis and pyelonephritis of pregnancy  Other infections of genito-urinary tract during pregnancy.  Toxaemias of pregnancy  Placenta praevia  Other haemorrhage of pregnancy.  Ectopic pregnancy  Anaemia of pregnancy  Pregnancy with malposition of foetus in uterus.  Other complications arising from pregnancy  Pregnancy associated with other conditions.		4	1 - 1			1			
	Sub-Total, 640–649	2	4	2	3	7	1			19
650 651 652	Abortion (650-652).  Abortion without mention of sepsis or toxaemia		2 — 	2 	3 1 4	1 2 — 3			_ 	8 2 1 11
670 671 672 673 674 675 676	Delivery with Specified Complication (670-678).  Delivery complicated by placenta praevia or antepartum haemorrhage  Delivery complicated by retained placenta.  Delivery complicated by other postpartum haemorrhage  Delivery complicated by abnormality of bony pelvis  Delivery complicated by disproportion or malposition of foetus.  Delivery complicated by prolonged labour of other origin  Delivery with laceration of perineum, without mention of other laceration  Delivery with other trauma  Delivery with other complications of childbirth	- - - - 1	1 4	2 -5   		1 -5    2	2 -1 - 1 - - 2			6 20 - 2 - 10 - 23
	Sub-Total, 670–678	4	8	7	4	8	6		1	38
680 681 682 683 684 685 686 687 688 689	Complications of the Puerperium (680-689).  Puerperal urinary infection without other sepsis.  Sepsis of childbirth and the puerperium.  Puerperal phlebitis and thrombosis.  Pyrexia of unknown origin during the puerperium.  Puerperal pulmonary embolism.  Puerperal eclampsia.  Other form of puerperal toxaemia.  Cerebral haemorrhage in the puerperium.  Other and unspecified complications of the puerperium.  Mastitis and other disorders of lactation.  Sub-Total, 680-689.	1 - - - - - 1				1     1	1			2  1 2 1  
	Total Class XI, 640–689	7	16	11	12	19	8		1	74
		-	1		1		b			



## STATISTICS OF NOTIFIABLE DISEASES, 1ST JULY, 1947 TO 30TH JUNE 1948.

Α	1	A = ×	Nomma
Α.	I.	ALL	NOTIFICATIONS.

Diseases.	CAP	e Province	(EX TRANS	KEI).		Tran	SKEI.			Nat	AL.			Trans	SVAAL.			Orange F	REE STATE.			Uni	on.	
Discuses.	European.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatics.	Coloureds.	European.	Natives	Asiatic.	Coloureds. E	uropean.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatic.	Coloureds.
XX1 Anthrax. XX2 Cerebro-Spinal Meningitis. XX3 Diphtheria. XX4 Enteric Fever XX5 Erysipelas. XX6 Puerperal Fever XX7 Scarlet Fever. XX8 Smallpox. XX9 Typhus Fever XX0 Plague. X1X Acute Poliomyelitis. X22X Asiatic Cholera X33X Glanders. X4X Lead Poisoning. X5X Gonnorrhocal Opthalmia. X6X Infective Encephalitis X7X Leprosy. X8X Malta Fever X9X Opthalmia Neonatorum. X0X Amoebic dysentry. X8X Rabies. XXX Trachoma. XXX Trachoma. XXX Tuberculosis of the Glands. XXX Tuberculosis Peritonitis. XXX Tuberculosis Meningitis XXX Tuberculosis Meningitis. XXX Tuberculosis Meningitis. XXX Pellow Fever. XXX Pellow Fever. XXX Relapsing Fever.	343 128 33 24 459 — 22 — 76 — 17 3 — 23 — 5 711 5 42 1 20 — —	10 46 79 202 8 65 13 99 302 10 32 — 3 1 23 1 37 — 6 3,342 57 244 23 53 — 2	- 5 5 2 - 3 - 3 8 - 2 - 3 - 3 - 3	1 160 269 207 21 73 55 2 48 — 29 — 5 6 3 — 194 — — 13 3,629 43 215 14 86 —		- 3 314 137 6 23 29 81 304 8 6 7 - 22 - 36 2 2,435 242 309 9 3 - 5		- 2 4 9 - 1 - 2 - 1 - 2 - 1 - 2 - 1 - 33 2 2 - 1 - 1	1 19 125 49 14 3 159 — 15 — 144 — 1 — 1 7 2 — 21 200 — 282 — 17 — 3 — —	2 43 214 494 6 51 21 8 50 — 110 — 24 6 49 2 164 1,370 — 2 4,098 69 484 49 47 — 1	13 73 124 1 13 1 - 8 - 43 1 - 1 - 32 15 - 1 850 10 80 12 9	2 20 25 5 2 5 - 1 - 10 1 3 86 200 1 17 - 2	-333 518 255 71 120 1,392 3 4 1,058 2 29 4 3 13 2 2 335 2 34 1 18 - 1	9 447 413 469 24 117 18 64 50 4 322 — — 2 2 93 — 121 6 — 62 3,259 134 356 41 68 — 58	-4 18 9 -6 7 - 21 - 1 - 2 - 28 - 4 1 - 1	- 7 26 14 2 4 14 1 - 32 10 - 143 2 18 1 8	- 6 75 71 7 5 175 7 4 1 99 -  -  -  1 -  25 -  2 -  -  -  -  -  -  -  -  -  -  -  -  -	9 18 207 147 1 5 9 5 9 5 84 — 1 1 1 4 — 7 1 1 — 316 3 31 — 9 —		- 2 1 - 1 - 1 - 1 1	3 121 1,090 505 128 152 2,193 11 45 6 1,380 — 1 — 3 59 9 3 58 202 — 7 1,460 8 98 98 2 41 — 1	30 557 1,227 1,449 45 261 90 257 715 27 554 — — 37 10 201 3 365 1,377 1 — 72 13,450 505 1,424 122 180 — 66	-22 96 135 1 20 11 -12 -65 - -1 1 2 -34 50 - - 1 923 10 86 13 13 - -	1 173 320 255 28 81 74 3 50 1 73 - - - 5 6 5 1 208 85 - - - 13 4,020 48 253 15 97 - 1
Total	1,977	4,658	58	5,073	161	3,981	11	59	1,063	7,364	1,322	380	3,903	6,139	103	284	482	883	2	21	7,586	23,025	1,496	5,817

Table A (ii).—I.D. Deaths, 1947–48.

STATISTICS OF NOTIFIABLE DISEASES (DEATHS), 1ST JULY 1947 TO 30TH JUNE, 1948.

D	1	Атт	DEATTIC	NOTIFIED.
D.	1.	ALL	DEA1H3	NUTIFIED.

B. I. ALL DEATHS NOTIFIED.																								
Diseases.	Сан	PE PROVINCE	(EX TRANS	KEI).		Trai	NSKE1.			Nat	AL.			Trans	VAAL.			Orange F	REE STATE	,		Unic	DN.	
	European.	Natives.	Asiatic.	Coloureds	European.	Natives.	Asiatics.	Coloureds	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.
XX1 Anthrax. XX2 Cerebro-Spinal Meningitis. XX3 Diphtheria. XX4 Enteric Fever. XX5 Erysipelas. XX6 Puerperal Fever. XX7 Scarlet Fever. XX8 Smallpox. XX9 Typhus Fever. XX9 Plague. X1X Acute Poliomyelitis. X22 Asiatic Cholera. X33 Glanders. X44 Lead Poisoning. X5X Gonorrhoeal Opthalmia. X6X Infective Encephalitis. X7X Leprosy. X8X Malta Fever. X9X Opthalmia Neonatorum. X0X Amoebic dysentry. XX8 Rabies. XX9X Sleeping Sickness. XX1 Trachoma. XX1 Tuberculosis of the Glands XX1 Tuberculosis of the Bone. XX1 Tuberculosis Meningitis. XX1 Tuberculosis Fever.	3 17 8 2	- 14 12 16 - 2 - 37 - 1 - 1 - 2 - 1 - 2 - 1,175 11 106 17 56 - 1		- 30 12 16 - 2 4 - 6 1 1 1 1 2 1,550 3 85 11 173 		1			- 1 8 3	-3 35 48 -5 -6 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	- 6 10 8 2 2 3 296 4 1 3 4 1 3	- 4 3	- 15 25 12 1 2 - 1 52 1 52	2 71 62 71 1 2 - 1 2 - 16 1,055 3 275 54 97		- 5 1 - 1 - 1		- 1 4 7 7			19 33 23 3 21 1 - 2 73 - 31 - 362 - 44 - 44	2 89 113 143 1 9 — 1 43 2 22 22 — — 1 1 1 — 4 74 — — 3,709 8 456 75 168 — 1	- 9 11 8 9 11 8 3 - 3 - 3 - 3 - 3 - 3 - 4 - 1 8 - 1 8 6 1 8 1 8 1 8 1 8 1 8 1 8	-35 18 19 1 2 4 -6 1 2
Total	281	1,441	32	1,897		1			125	1,675	335	66	233	1,714	18	119	21	101		6	660	4,932	385	2,088

A. 1. ALL NOTIFICATIONS.																							
Disease.	CAPI	E PROVINCE	(ex Transke	EI).	TRA	NSKEI.			Nat	AL.			TRAN	SVAAL.			ORANGE F	REE STATE.			Un	ION.	
	European.	Natives.	Asiatic.	Coloureds. Europea	n. Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.	European.	Natives.	Asiatic.	Coloureds.
XX1 Anthrax XX2 Cerebro-Spinal Meningitis XX3 Diphtheria XX4 Thyphoid Fever XX5 Erysipelas XX6 Puerperal Fever XX7 Scarlet Fever XX8 Smallpox XX9 Typhus Fever XX0 Plague X1X Acute Poliomyelitis X2X Asiatic Cholera X3X Glanders X4X Lead Poisoning. X5X Gonorrhoeal Opthalmia X6X Infective Encephalitis X7X Leprosy X8X Malta Fever X9X Opthalmia Neonatorum X0X Amoebic dysentry 1XX Rabies. 2XX Sleeping Sickness. 3XX Trachoma 4XX Pulmonary Tuberculosis 5XX Tuberculosis of the Glands 6XX Tuberculosis of the Spine. 7XX Tuberculosis Peritonitis. 8XX Tuberculosis Meningitis 9XX Yellow Fever OXX Relapsing Fever	249 79 36 7 564 1 21 - 36 8 2 - 13 - 13 - 4 622 5 19 2 19	20 43 160 188 3 60 17 8 53 11 21 — — — 2 6 25 — 27 — — — — — — — — — — — — —	- 2 12 3 - 1 - 1 - 3 - 1 3 1 - 59 2 5 - 2 - 2 2	2   -3   -3   -3   -3   -3   -3   -3   -	301 214 17 4 —		- 1 6 2 - 4 - 2 1 1		-48 402 507 9 76 7 3 42 -6111 8 74 - 63 7 3 4,337 109 468 60 42	13 151 102 - 5 1 - 2 - 7 - 1 - 5 - 3 740 14 54 11 13 1122	10 68 25 5 5 8   6   1   18    18    15 3 14    15 3	90 687 350 76 131 1,409 31 6 1 183 — — — — — — — — — — — — — — — — — — —	15 917 528 841 27 223 23 776 19 2 80 — — 5 21 78 1 115 — 103 4,297 218 358 54 94 — 68	- 6 35 16 1 4 3 64 - 1 1 5 1 5 	10 37 26 5 19 2 19 1 6 1 12 184 5 16 3 8 254	1 4 82 37 7 2 177 8 2 177 8 2 177 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 14 232 203 5 8 6 4 6 17 35 18 - 17 - 4 - 1 291 1 26 3 2		- 2 4 - 1 - 1 	4 149 1,309 550 134 141 2,347 40 53 1 304 — — — 37 6 3 30 1 2 — 8 1,375 19 57 57 5 28 — 3	47 1,028 1,401 1,887 48 402 70 799 185 30 197 — 27 35 207 1 243 9 4 — 123 15,377 694 1,217 157 193 — 68 24,449	21 198 121 1 9 5 64 4 - 11 - 1 10 - 3 - 1 896 17 72 12 21 - 1,468	2 190 342 224 30 87 59 20 17 1 38 — — 4 5 10 — 171 — 13 4,113 64 206 18 134 —
Total	1,725	4,290	~ 90	4,704 70	4,054	/	58	987	6,337	1,122	611	3,424	8,863	249	334	394	903			0,000	24,447	1,400	3,740

TABLE A (iv).—I.D. DEATHS, 1948–49.

STATISTICS OF NOTIFIABLE DISEASES (DEATHS), 1ST JULY, 1948 TO 30TH JUNE, 1949.

B. 1. ALL DEATHS NOTIFIED.																								
Diseases.	Сар	e Province	(EX TRANS	KEI).		Tran	SKEI.			Nat	AL.			Trans	VAAL.			Orange Fr	REE STATE.			Unio	ON.	
	European.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatics.	Coloureds.	European.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatic.	Coloureds.	European.	Natives	Asiatic.	Coloureds. E	uropean.	Natives	Asiatic.	Coloured
X1 Anthrax.  X2 Cerebro-Spinal Meningitis.  X3 Diphtheria.  X4 Typhoid Fever.  X5 Erysipelas.  X6 Puerperal Fever.  X7 Scarlet Fever.  X8 Smallpox.  X9 Typhus Fever.  X0 Plague.  X1 Acute Poliomyelitis.  X2 Asiatic Cholera.  X3 Glanders.  X4 Lead Poisoning.  X5 Gonorrhoeal Opthalmia.  X6 Alfective Encephalitis.  X7 Leprosy.  X8 Malta Fever.  Y9 Opthalmia Neonatorum.  X8 Malta Fever.  Y9 Amoebic dysentry.  X8 Rabies.  X8 Sleeping Sickness.  X8 Trachoma.  X8 Tuberculosis of the Glands.  X8 Tuberculosis of the Spine.  X8 Tuberculosis Peritonitis.  X8 Tuberculosis Meningitis.  X8 Yellow Fever.  X8 Relapsing Fever.	20 4 ———————————————————————————————————		- 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	- 31 32 24 - 3 - 4 1 1 1 1 1 1 1 - 1,744 4 75 13 198 1					5 23 5 — — — — — — — — — — — — — — — — — —	- 6 98 52 5 - 6 1 2 4 2 17 1,479 2 49 14 20 	3 19 4 ——————————————————————————————————	- 1 5 1	-24 22 15 2 -2 - 2 - 7 14	114 666 1,113 - 4 - 59 - 2 6 4 2 1,042 2 343 28 78	144	- 5 3 8 - 3 8 - 3 1 - 3		11 9 - 1 - 2 - 2				135 187 198 — 111 — 59 111 9 8 — — — 15 2 — 2 17 — 4,000 8 466 68 164 —	- 4 21 4 - 3 5 1 - 1 1 1 1 1 1 1 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 - 1 1 1 - 1 1 - 1 1 - 1 1 - 1 1 - 1 1 1 - 1 1 -	37 40 33 — 3 — 3 4 1 1 — — — — — 1,878 4 99 16 206 —
TOTAL	215	1,578	38	2,131		3	_	_	144	1,757	353	81	173	1,863	35	113	23	159		2	555	5 360	426	2 321

Table A (v).—Notified Deaths due to Infectious Diseases (the figures refer to Calendar Years).

As notification of births and deaths was not compulsory for all races in rural areas during the years, 1947–51, which are here reflected, only deaths registered with the Registrar of Deaths, and supplied by the Bureau of Census and Statistics are given here.

						DISEASE.	SE.								
		Амо	AMOEBIC DYSENTRY.	rry.			Турного ок		ENTERIC FEVER.			Z	Malta Fever.	~	
	1947.	1948.	1949.	1950.	1951.	1947.	1948.	1949.	1950.	1951.	1947.	1948.	1949.	1950.	1951.
Cape Natal. Transvaal. Orange Free State	4 8 8 1 1 9 1 9 1 1 9 1 1 9 1 1 9	04 <i>L</i> -1	£ 4 II	400	L25.7	22 2 4 4 4 3 3 2 5	16 6 42 2	8 4 0 E	111 6 4	~   ~ ~ ~	-	1111	1111	1111	-
Total European. Total Asiatic Total Coloured	28 28 36 393	14 30 29 342	18 7 25 343	26 21 428	14 16 26 408	54 24 85 366	66 21 72 260	35 2 59 312	24 15 47 423	11 7 35 301	-		1-1-		-     -
TOTAL ALL RACES	485	415	393	484	464	529	419	408	509	354		2	2	2	2
						DISEASE	SE.								
		ENCEPE	ENCEPHALITIS (INFECTIVE).	ECTIVE).	*		Meningit	Meningitis- (Cerebro-Spinal).	o-Spinal).			Рогіо	POLIOMYELITIS (ACUTE).	cute).	
	1947.	1948.	1949.	1950.	1951.	1947.	1948.	1949.	1950.	1951.	1947.	1948.	1949.	1950.	1951.
Cape Natal Transvaal Orange Free State	2   6   1	0046	1 18 1	11 4 8 8 4	<b>ω−</b> 4κ	2111	3112	27.82	22 1 1 2 8 8	32 0 18	4501	117 - 21	1726	m4r	8277 8
Total European Total Asiatic Total Coloured Total Native	12 1 1 9	18 13	22 1 12 30	47 16 44	11 3 16 32	23 33 124	40 11 18 191	53 47 198	42 3 26 126	64 119 117 266	19 4	128 5 11 49	16 2 2 12 12	12 3	22,000
TOTAL ALL RACES	23	37	65	109	62	180	260	298	197	466	26	193	32	22	37

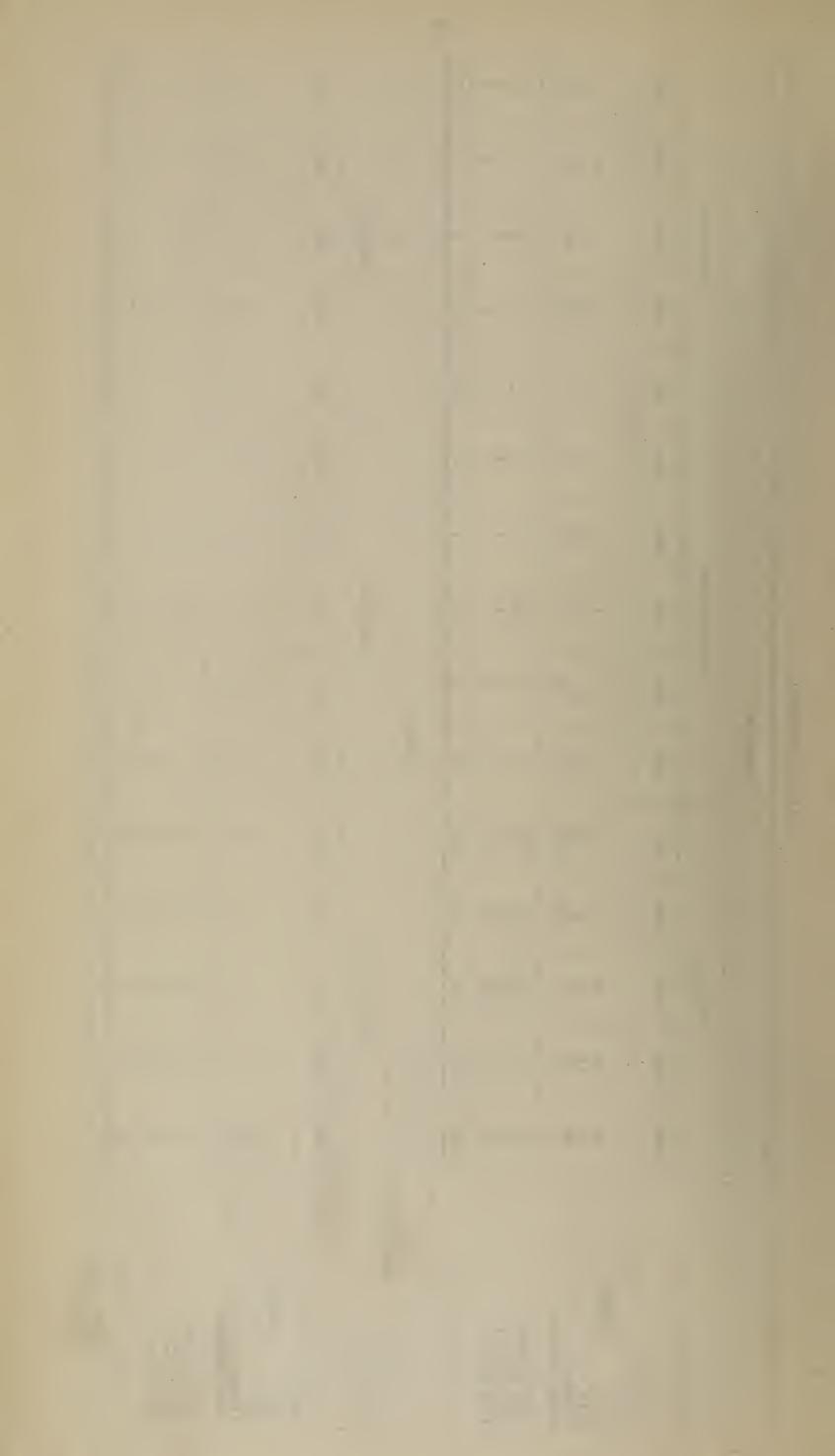
TABLE A (v).—NOTIFIED DEATHS DUE TO INFECTIOUS DISEASES (THE FIGURES REFER TO CALENDAR YEARS) (continued).

		1951.	-	11.001	16			1951.	-	29   29	31	
		1950.	101	10 1 13 126	150			1950.	-	29	36	
	SMALL POX.	1949.	1171	18 43 11 272	344		LEPROSY.	1949.		29	29	
		1948.	[ [ [ ]	3 1 4 127	135			1948.	1   2	3 20	92	
		1947.		3 .	79			1947.	w   w	97682	95	
		1951.	-	-	1			1951.	1111			
		1950.	[444	9     7	8			1950.		%	3	
	TYPHUS.	1949.	188	4 11 10	56		RABIES.	1949.	1-2	m	3	
SE.		1948.	114	6	28	SE.		1948.	-	-	1	
DISEASE		1947.	1001	o   e e e	34	DISEASE.	-	1947.				
		1951.	-	1   61	5			1951.				
		1950.			2	_	ir.	1950.		-	1	
	PLAGUE.	1949.	-	1   24	7		RELAPSING FEVER.	1949.		-	1	
		1948.		4	4		REL	1948.			2	
		1947.			2			1947.	-	1   1	7	
			Cape European. Natal. Transvaal. Orange Free State	Total European. Total Asiatic. Total Coloured. Total Native.	TOTAL ALL RACES				Cape Natal. Transvaal. Orange Free State	Total European. Total Asiatic. Total Coloured Total Native.	TOTAL ALL RACES	

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DISEASE.

	1951.	-111	-	3			1951.			7	
	1950.	1111	-2	3			1950.	1111			
ERYSIPELAS.	1949.	-	3.21	9		TRACHOMA.	1949.				
	1948.	w	4   2%	11			1948.	-	<del>      4</del>	9	
	1947.	2  -	6 4 9	13			1947.		m	3	
	1951.	-   -	0 40	8			1951.				
۳.	1950.	-	s   1	4		-	1950.			1	
SCARLET FEVER.	1949.	-111	17.11	10		ОРНТНАЕМІА.	1949.	1111	7 9	13	
Sc	1948.	6	0   70	5	SE.		1948.		-   %	4	
	1947.	-	-	2	DISEASE		1947.	1111	60	11	
	1951.	. 27 9 27 14	122 23 54 385	584	<b>→</b>		1951.	-   -	13 13 35	52	
	1950.	25 20 20	101 22 54 388	595	_	ver.	1950.	2	25 14 40	59	
 Динтнекіа.	1949.	15 15 58 9	101 5 45 237	388		PUERPERAL FEVER.	1949.	-111	11 1 1 2 4 5 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	50	
	1948.	24 11 15 15	103 6 36 170	315	-	Pu	1948.	2	44 119 . 55	98	-
	1947.	41 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	64 14 14 96	188			1947.	∞   <i>α</i>	10 6 23 88	127	
		Cape Natal. Transvaal. Orange Free State	Total European	TOTAL ALL RACES				Cape	Total European. Total Asiatic Total Coloured Total Native	TOTAL ALL RACES	



																							DISEASE.																					
Province.	Anthrax	.	Diphtheria.	Enceptinfec	halitis,	Enteri Typhoid	c or Fever.	Erysip	pelas.	Lead F	oisoning.	Lepr	osy.	Brucel	osis.	Meningitis, Cerebro-Spina	. 0	pthalmia.		Piague.	Po	liomyelitis Acute.	S, Puerpe	eral Fever.	Ra	bies.	Relapsing	Fever.	Scarlatin	a.	Smallpox.	Tet	inus.	Trachom	na.	Trypanos	omiasis.	Tuberculosis, Respiratory.		erculosis, espiratory.	Typhus Fe	ever.	TOTAL.	
	Cases.	Deaths.	Cases. Death	s. Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases. Dea	hs. Cases	s. Dear	ths. Case	es. De	eaths. Cases	s. Dea	aths. Cases.	Deaths	cases.	Deaths.	Cases.	Deaths.	Cases. De	eaths. Ca	ses. Deaths	. Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths. C	ases. Deaths	s. Cases.	Deaths.	Cases.	Ocaths. C	ases. De	iths.
	<u> </u>			<del>- !</del>	1				1	1										. '		I, I	EUROPEAN.			·														3				
Cape (including Transkei) Natal Transvaal. Orange Free State	3 7 1	_	474 16 213 12 875 77 182 18	10 9 63	4 3 14	81 276 69	3 2 1 1	46 18 96 7	= =	1 1		$\frac{3}{2}$	=	3 1 3	=	71 25 198 33	21 20	1	1 -		- 62 - 43 - 252 - 21	1	1 10 7 10 46 4 1	=	= 1	=	=	=	759 298 2,033 266	3 7 6	20 4	=			=	_ _ _ _	_ _ _ _	602 — 500 — 910 — 57 —	18 22 43 4	=			648	33 29 131 24
TOTAL	11		1,744 123	82	21	577	7	167		2		8		7		327 2	41	1	1 1		378	1	18 64		1				3,356	16	20 4			7		1	1	2,069 —	87		35		0,963	217
	1			<u> </u>	11					1				. 1		r						11,	I.—NATIVE.		•																			
Cape (including Transkei) Natal Transvaal Orange Free State	18		291 41 684 134 1,426 214 741 113	9 55 —	2 6 16 —	679 1,142 1,591 357	42 153 102 21	8 18 22 1	=	<u>-</u>	=	89 130 23	 1 1	_ _ 1		152 2 104 1 1,107 120 102 1					$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		54 2 98 4 353 1 14	1 16 6 —	<u>-</u> 1		34	Ξ	17 30 25 14		47 2 44 17 79 36 33 3	<u>-</u> 1 -	= = = = = = = = = = = = = = = = = = = =	7 4 99 —	<u>-</u> 1 -	=		1,570 — 7,515 — 6,341 — 542 —	818 1,330 546 11 2,705	=	101 7 37 7			126 345 503 162
TOTAL	18	4	3,142 502	64	24	3,769	318	49		1	<u> </u>	242	2	1		1,465 17:	675		17		9 108	_	7 519	23	1		34		86	1 8	38	1		110										
												<u> </u>										111	I.—ASIATIC.																				1	
Cape (including Transkei). Natal	=	=	9 2 133 28 51 — — —	8 4 -	- 2 3 -	257 28 -	16 —	1 2 —		= =	=======================================	=		=		3 26 9 — — —	5 1					-	1 9 1 2	- 1 - 1	= =	=	=	= = =				= = = = = = = = = = = = = = = = = = = =		2 1 3	_  - - - - -	-	_	67 1,279 89 2 — 1,437 —	152 13 —	=	1		93 1,884 201 2 2,180	60 5 ———————————————————————————————————
Total			193 30	12		200										38 1.																			1									
																						IV.—	-COLOURED.												1				1	1		1	l	116
Cape (including Transkei). Natal	6 1 - 7		290 30 52 3 332 12 12 6	10 6	3 - 3	293 30 37 4	25 4 1 1	23 4 2 —	1  	- 3 - - 3	= =	8 1 - 9		2 	= = =	294 5 9	196 3 5 9 - 3		$\begin{bmatrix} 2 \\ - \\ - \end{bmatrix}$		$ \begin{array}{c cccc}  & & 34 \\  & & 3 \\  & & 1 \\  & & 38 \end{array} $		- 60 3 14 1 - 78	$\frac{1}{2}$	=======================================	= = = = = = = = = = = = = = = = = = = =		= = = = = = = = = = = = = = = = = = = =		2	2	= =	=	14 1 1 —		=	-	5,432 — 341 — 477 — 22 — 6,272 —	547 29 20 6		8 - 8		7,320 479 943 51 8,793	7 39 9
TOTAL						-					-															1					1	1	11	<u>'</u>										
																						V.—TOT	AL (ALL RAC	ES).		1					1		1	1	1	-			1 201	1	139	10	23.753	277
Cape (including Transkei). Natal Transvaal. Orange Free State	9 8 19	<u>-</u> _ 4	1,064 89 1,082 177 2,684 303 935 137	20 26 128	9 11 33 —	1,126 1,510 1,932 430	70 175 104 23	78 42 120 8	- <u>-</u>	1 3 2	=======================================	100 — 133 26	<u>-</u> 1 1	5 1 4		520 8 164 3 1,346 16 136 1	1 136 5 336 6 30	-	$\frac{3}{-}$ $\frac{10}{10}$		5 119 - 75 1 305 3 36	1	1 124 6 117 15 415 5 16	2 17 6 2		=======================================	34	=	875 332 2,068 281		49 2 44 17 99 40 33 3		=	21 7 108 —	<u>-</u> 1 -	<u>-</u> 1	- 1 -	17,671 — 9,635 — 7,817 — 623 —	1,391 1,533 622 21 3,567		138 10 39 9	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		277 441 678 195
TOTAL	36	4	5,765 706	174	53	4,998	372	248	1	6		259	2	10		2,166 29	934		3 21		9 535		27 672	27	2		34		3,556	19 8	25 62	_ I	-	136	1	1		30,140						

<sup>\*</sup> The fact that in some cases more deaths have been notified than cases is to be explained by the incompleteness of the returns rendered to the Department.

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OTHECATION OF DISEASE AND NUMBERS OF DEATHS DURING THE YEAR ENDED 31ST DECEMBER, 195
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Table II (1) (a).—Incidence of Deaths from Diphtheria per 100,000 of Population (Europeans).

Year (Calendar).	Rate per 100,000 of Population.	Year (Calendar).	Rate per 100,000 of Population.
1920	12.33	1937	5.87
1921	11 · 17	1938	6.53
1922	14.01	1939	6.76
1923	15.51	1940	6.97
1924	10.93	1941	5.92
1925	14.23	1942	7.22
1926	6.56	1943	
1927	6.32	1944	6.71
1928	8.97	1945	6.17
1929	5.83	1045	4.80
1930	8·18	1946	3.66
1021	·	1947	2.63
1931	7.05	1948	4.11
1932	4.68	1949	3.93
1933	4.66	1950	4.25
1934	6.27	1951	4.60
1935	3.95	1952	Not yet
1936	4 · 48		available.

Table II (1) (b).—Diphtheria—Distribution of Cases and Deaths—by Age and Race. Reported during the Period 1st July, 1947 to 30th June, 1948.

			C	ASES.						THS.		
						AGE GRO	OUPS.					
Province.	Under 1 Year.		5-9.	10.+	Total.	Annual Incidence Rate pe 100,000 of Total Population.	r Under 1 Year.	1–4.	5-9.	10.+	Total	Death Rate per 100,000 of Total Popu- lation.
					Euroi	PEAN.			1	<u> </u>	1	
Cape (including Transkei)  Natal  Transvaal  Orange Free State	27 6 23 6	121 38 186 30	104 30 189 25	120 51 120 14	372 125 518 75	44.15	3 -2 -	13 6 16 3	1 1 5		17 8 25 3	2·14
Union	62	375	348	305	1,090		5	38	7.	3	53	
			· · · · · · · · · · · · · · · · · · ·		NATI	IVE.	,	,	L			
Cape (including Transkei) Natal Transvaal Orange Free State	13 33 41 5	108 97 169 79	105 34 125 72	167 50 78 51	393 214 413 207	15.21	2 6 9	8 25 40 1	1 4 10 1	1 3 1	12 35 62 4	1 · 40
Union	92	453	336	346	1,227		18	74	16	5	113	
					Asian	FC						
		1	<u> </u>		ASIA				<u> </u>	1 1		
Cape (including Transkei) Natal Transvaal Orange Free State	9 1 —	2 25 8 —	3 26 6 —	13 3 —	5 73 18 —	30.97	3 1 			_ _ _	$\begin{bmatrix} -1 \\ 1 \\ -1 \end{bmatrix}$	3.55
Union	10	35	35	16	96		4	5	2		11	
		1	M	IXED AN	D OTHER	COLOURED	RACES					
							lances.			1	1	
Cape (including Transkei) Natal Transvaal Orange Free State	32 2 1	127 11 9	53 3 7 —	61 4 9 1	273 20 26 1	32.42	1 1 —	8 2 —	2 1 1	1 - 1	12 4 1 1	1.83
Union	35	147	63	75	320		2	10	4	2	18	
			1	To	OTAL (ALL	RACES).	1	l			0	
Cape (including Transkei)	72 50 66 11	358 171 372 109	265 93 327 97	348 118 210 66	1,043 432 975 283	23·11	6 10 12 1	29 38 56 4	4 8 16 1	2 1 5 2	41 57 89 8	1.65
Union	199	1,010	782	742	2,733	=	29	127	29	10	195	
									1			

Table II (1) (b) (continued).—Diphtheria—Distribution of Cases and Deaths—by Race and Age. Reported during the Period 1st July, 1948 to 30th June, 1949.

				CASES.					DEA	THS.		
			,			Age (	GROUPS.					
Province.	Under 1 Year.	1–4.	5–9.	10.+	Total.	Annual Incidence Rate per 100,000 of Total Population.	Under 1 Year.	1–4.	5–9.	10.+	Total	Death Rate per 100,000 of Total Popu- lation.
					Euroi	PEAN.						
Cape (including Transkei) Natal	7 5 27 1	114 96 250 31	84 98 252 36 470	58 78 158 14 308	263 277 687 82 1,309	51.61		9 12 15 6	9 11 4 1		20 23 19 7	2.85
O NOW.	-10	421	470	308				72	25		09	· ·
	1	1	l	I	NAT	IVE.			ı.		l i	
Cape (including Transkei) Natal Transvaal Orange Free State	11 36 24 6	107 212 229 76	58 70 125 98	63 84 150 52	$   \begin{bmatrix}     239 \\     402 \\     528 \\     232   \end{bmatrix} $	17.07	1 12 9 2	7 62 33 3	3 20 18 4	1 4 6 2	12 98 66 11	2·27
Union	77	624	351	349	1,401		24	105	45	13	187	
					Asia	гіс.						
Cape (including Transkei) Natal Transvaal Orange Free State	1 11 —	7 64 11 —	2 45 13 —	2 31 11 —	$\begin{bmatrix} 12 \\ 151 \\ 35 \\ - \end{bmatrix}$	60.74		1 12 1		=	$\begin{bmatrix} 1\\19\\1\\-\end{bmatrix}$	6.45
Union	12	82	60	44	198		3	14	4	_	21	
			N	IXED ANI	OTHER	Coloured	RACES.					
Cape (including Transkei) Natal Transvaal Orange Free State	20 4 2 —	125 31 18 2	47 17 10	41 16 7 2	233 68 37 4	33.66	3 1 —	24 4 2 —	3 1 1	2 _ _ _	$\begin{bmatrix} 32 \\ 5 \\ 3 \end{bmatrix}$	3.94
Union	26	176	74	66	342		4	30	4	. 2	40	
				To	OTAL (ALI	RACES).						<u> </u>
Cape (including Transkei)	39 56 53 7	353 403 508 109	191 230 400 134	164 209 326 68	747 898 1,287 318	26.89	4 16 9 2	41 90 51 9	15 35 23 5	5 4 6 2	65 145 89 18	2.65
Union	155	1,373	955	767	3,250		31	191	78	17	317	

Table II (1) (b) (continued).—Diphtheria—Distribution of Cases and Deaths—by Race and Age. Reported during the Period 1st July, 1949 to 30th June, 1950.

			CA	SES.					Death	s.		
						Age G	ROUPS.					
Province.	Under 1 Year.	1–4.	5–9.	10. +	Total.	Annual Incidence Rate per 100,000 of Total Population.	Under 1 Year.	1–4.	5–9.	10. +	Total	Death Rate per 100,000 of Total Popu- lation.
					Europ	EAN.						
Cape (including Transkei) Natal Transvaal Orange Free State	12 6 22 4	151 99 302 61	128 126 284 54	109 88 184 39	400 319 792 158	64·47		11 8 14 11	3 3 6 2	1 -3 - 4	$ \begin{array}{c}     15 \\     12 \\     25 \\     13 \end{array} $	2·51
Union	44	613	592	420	1,669		3	44	14	4		
				_	Nati	VE.				1	<u> </u>	· .
Cape (including Transkei) Natal Transvaal Orange Free State	26 56 67 17	151 289 558 258	127 98 386 261	103 102 308 184	407 545 1,319 720	35.83	3 12 10 1	16 85 56 16	2 20 33 12	2 7 11 3	23 124 110 32	3.49
Union	166	1,256	872	697	2,991		26	173	67	23	289	
					Asia	пс.						
Cape (including Transkei) Natal Transvaal Orange Free State		4 65 14	1 54 18 —	1 22 8 —	6 143 41	55·40		12 —		=	$\begin{bmatrix} -16\\2\\2 \end{bmatrix}$	5·25
Union	3	83	73	31	190		2	12	4		18	
			N	MIXED AN	D OTHER	Coloure	RACES.					
Cape (including Transkei) Natal Transvaal Orange Free State	37 2 5	173 24 27 5	58 15 23 8	47 19 18 5	315 60 73 18	44.33	2 1 2	16 2 3 1	3 3 2 —	2	$\begin{bmatrix} 23 \\ 6 \\ 7 \\ 2 \end{bmatrix}$	3.62
Union	44	229	104	89	466		5	22	8	3	38	
				Т	OTAL (AL	L RACES).						
Cape (including Transkei) Natal Transvaal Orange Free State	75 66 95 21	479 477 901 324	314 293 711 323	260 231 518 228	1,128 1,067 2,225 896	43 · 13	5 16 14 1	43 107 73 28	8 28 43 14	5 7 14 4	61 158 144 47	3.34
Union	257	2,181	1,641	1,237	5,316		36	251	93	30	410	

Table II (1) (b) (continued).—Dipthheria—Distribution of Cases and Deaths—by Race and Age. Reported during the the Period 1st July, 1950 to 31st December, 1951.

				CASES.					DEA	THS.		
						Age (	GROUPS.					
Province.	Under 1 Year.	1–4.	5-9.	10. +	Total.	Annual Incidence Rate per 100,000 of Total Population.	Under 1 Year.	14.	5-9.	10. +	Total	Death Rate per 100,000 of Total Popu- lation.
					Euroi	PEAN.						
Cape (including Transkei) Natal Transvaal Orange Free State	25 15 40 14	193 73 289 54	138 77 313 65	118 48 233 49	474 213 875 182	65 · 24	2 1 9 1	8 8 30 9	6 2 26 3		16 12 77 18	4.60
Union	94	609	593	448	1,744		13	55	37	18	123	
					NATI	IVE.						
Cape (including Transkei) Natal Transvaal Orange Free State	22 131 115 62	138 312 562 244	77 134 416 181	54 107 333 254	291 684 1,426 741	37.02	6 33 24 19	17 81 112 39	10 9 64 19	8 11 14 36	41 134 214 113	5·91
Union	330	1,256	808	748	3,142		82	249	102	69	502	
					Asia	ric.						
Cape (including Transkei) Natal Transvaal Orange Free State		6 71 18 —	1 41 14 —	2 16 14 —	9 133 51 —	53.76		2 17 —			2 28 —	8.36
Union	10	95	56	32	193		3	19	5	3	30	
			N	AIXED ANI	OTHER	Coloured	RACES.					
Cape (including Transkei) Natal Transvaal Orange Free State	25 6 19 1	153 26 43 5	62 8 243 2	50 12 27 4	$ \begin{array}{c} 290 \\ 52 \\ 332 \\ 12 \end{array} $	63.04	3 1 - 2	18 2 6 4	$\begin{bmatrix} 6 \\ -3 \\ - \end{bmatrix}$	_3 _3 _	30 3 12 6	4.69
Union	51	227	315	93	686	-	6	30	9	6	51	
				To	OTAL (ALI	RACES).	1				1	
Cape (including Transkei) Natal	72 157 179 77	490 482 912 303	278 260 986 248	224 183 607 307	1,064 1,082 2,684 935	45.88	11 38 33 22	45 108 148 52	22 16 93 22	11 15 29 41	89 177 303 137	5.62
Orange Free State												

Table II (1) (b) (continued).—Diphtheria—Distribution of Cases and Deaths—by Race and Age. Reported during the Year ended 31st December, 1952.

		CASES. DEATHS.												
		-1					AGE C	GROUPS.						
Province.	Under 1 Year.	1-4 Years.	5–9 Years.	10-19 Years.	20— Years.	Total.	Incidence Rate per 100,000 of Population.	Year.	1–4. Years.	5–9 Years.	10-19 Years.	20— Years.	Total.	Death Rate per 100,000 of Popu- lation.
				<u></u>	E	UROPEAN.		•						
Cape Province	16 10 22 5	114 36 244 42	86 37 274 44	34 20 83 16	29 27 62 21	279 130 685 128	29·43 46·26 55·56 54·94	2 3 1	8 27 1	10 3			9 2 42 5	0·95 0·71 3·41 2·15
Union	53	436	441	153	139	1,222	45.34	6	36		2		58	2.16
						NATIVE.								
Cape Province Natal Transvaal. Orange Free State	15 79 62 20	98 116 416 136	46 36 322 128	36 18 132 54	23 18 60 32	218 267 992 370	8·66 14·63 27·90 46·13	2 13 27 1	13 18 63 21	2 4 36 16	· 4 8 6	1 3 2	17 40 137 46	0.68 2.20 3.85 5.74
Union	176	766	532	240	133	1,847	21.21	43	115	58	18	6	240	2.76
						Asiatic.								
Cape Province	7 8 1	16 26 3	7 35 12	13 7	- 4 1 -	32 86 24	177·78 27·83 47·06	=	2 4 —	2 4 1 —	=	=	4 8 1 —	22·22 2·59 1·96
Union	16	45	54	22	5	142	37.57		6	7			13	4.68
					С	OLOURED.								
Cape Province	23 1 4	116 5 30 7	45 7 9 1	24 1 8 1	12 — 1	220 14 51 10	21·74 42·42 64·56 66·67	4 1 -1	6 5 	3 	=	=	13 1 5 1	1·28 3·03 6·33 6·67
Union	28	158	62	34	13	295	25.90	6	11	3			20	1.76
					TOTAL (A	ALL RACI	es).							
Cape Province Natal Transvaal Orange Free State	61 98 89 25	344 183 693 185	184 115 617 173	96 52 230 71	64 49 123 54	749 497 1,752 508	16.66 20.30 35.62 48.38	6 16 30 3	29 22 95 22	8 8 47 19	 4 10 6	1 3 2	43 51 185 52	0.96 2.08 3.76 4.95
Union	273	1,405	1,089	449	290	3,506	27.15	55	168	82	20	6	331	2.56

TABLE II (2) (a).—LEPER INSTITUTIONS—PATIENTS THEREIN.

Institution.	Euroi	PEANS.	NA	TIVE.	Mı	XED	Ası	ATIC.	To	TAL.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Person s
On 30th June, 1947— Westfort (Pretoria) Mkambati Mjanyana Amatikulu Bochum	41 — — —	32 	533 79 231 206 61	310 75 210 167 48	58 — — —	32	6  	<u>2</u> 	638 79 231 206 61	376 75 210 167 48	1,014 154 441 373 109
Тотац	41	32	1,110	810	58	32	6	2	1,215	876	2,091
On 30th June, 1948— Westfort (Pretoria) Mkambati Mjanyana Amatikulu Bochum.	42 — — —	33 — — —	574 68 206 206 63	337 76 193 169 61	54 — — —	24 — — —	6 - - -	2 	676 68 206 206 63	396 76 193 169 61	1,072 144 399 375 124
Total	42	33	1,117	836	54	24	6	2	1,219	895	2,114
On 30th June, 1949— Westfort (Pretoria) Mkambati. Mjanyana Amatikulu Bochum	34 	22 — — —	590 65 204 199 61	.355 66 176 156 59	50 — — —	25 — — —	5 	<u>2</u> 	679 65 204 199 61	404 66 176 156 59	1,083 131 380 355 120
Тотаг	34	22	1,119	812	50	25	5	2	1,208	861	2,069
On 30th June, 1950— Pretoria Mkambati Mjanyana Amatikulu Bochum	37 — —	24 — — —	637 72 221 244 63	377 80 179 172 54	50 — — —	22 — — —	5 — — —	3 	729 72 221 244 63	426 80 179 172 54	1,155 152 400 416 117
Total	37	24	1,237	862	50	22	5	3	1,329	911	2,240
On 30th June, 1951— Westfort (Pretoria) Mkambati Mjanyana Amatikulu Bochum.	32 	18 — —	664 63 184 226 67	359 80 171 189 53	45 — — —	26 — — — —	5 — — —	2 _ _ _	746 63 184 226 67	405 80 171 189 53	1,151 143 355 415 120
TOTAL	32	18	1,204	852	45	26	5	2	1,286	898	2,184
On 31 December, 1951— Westfort (Pretoria) Mkambati Mjanyana Amatikulu Bochum	34 — — —	18 — — —	680 53 151 199 62	382 75 132 162 49	48 — — —	26 — — —	4 —	2 — —	766 53 151 199 62	428 75 132 162 49	1,194 128 283 361 111
Total	34	18	1,145	800	48	26	4	2	1,231	846	2,077_
On 31th December, 1952— Westfort (Pretoria) Mkambati Mjanyana Amatikulu Bochum	32 — — —	20 — —	661 50 123 202 58	373 63 123 163 47	46 - 1 -	29 — — —	<u>2</u> 	1 - -	741 50 124 202 58	423 63 123 163 47	1,164 113 247 365 105
Тотац	32	20	1,094	769	47	29	2	1	1,175	819	1,994

Table II (2) (b).—Leprosy: First Admissions, Recrudesced Cases, Discharges and Deaths, Year ended 30th June, 1948, 1949, 1950, 1951, and Six Months ending 31st December, 1951 and Year ended 31st December, 1952.

Institution.	Admissions for First Time.	Re- crudesced.	Dis- charged.	Died.
30th June, 1948— Westfort				
(Pretoria) Mkambati	302	44 8	187	95
Mjanyana	101	34	50 140	17 42
Amatikulu	95	30	77	39
Bochum	39	2	12	14
Total	574	118	466	207
30th June, 1949—				
Westfort				•
(Pretoria) Mkambati	281	18 7	302 49	56
Mjanyana	96	40	123	13 42
Amatikulu	138	18	126	34
Bochum	10	5	11	8
TOTAL	563	88	611	153
30th June, 1950—			100	
Westfort	440			- 1
(Pretoria) Mkambati	329 44	50 10	286 70	54
Mjanyana	127	48	132	10 43
Amatikulu	145	28 23	65	40
Bochum		23	12	15
Total	645	159	565	162
20.1 7 1051				
30th June, 1951— Westfort				
(Pretoria)	306	16	355	53
Mkambati Mjanyana	30 78	5 8	62 164	7
Amatikulu	117	5 8 2 5	104	23 26
Bochum	18	5	17	4
TOTAL	549	36	702	113
For singularity				
For six months ended 31th De-				
cember, 1951—				
Westfort (Pretoria).	204	2	191	17
Mkambati	24	-	50	3
Mjanyana Amatikulu	47 48	2 4 3	132	12
Bochum	10	3	100	13 3
Total	333	11	493	48
Year ended 31st December, 1952				
Westfort				
(Pretoria). Mkambati	300	39	266 61	28
Mjanyana	102	4	136	4 21
	165	23	180	13
Amatikulu		1 1	25	
Bochum		1	25	6
Amatikulu Bochum		75	668	72

Table II (2) (c).—Leprosy Cases remaining in their Own Homes on 30th June, 1948, 1949, 1950, 1951 and on 31st December, 1951 and 1952.

AND ON 3	IST DECEN	4BER, 1951	and 1952	2.
	Certified and Awaiting Removal to Leper Institu- tion.	Home Segre- gated.	Discharged from Lepe Institu- tions, still under surveil- lance.	Total.
30th June, 1948— Cape Province (excluding Transkei) Transkei	7	=	251 1,016 758	251 1,023 758
Natal Orange Free State		_	453 247	453 247
Union	7		2,725	2,732
30th June, 1949— Cape Province (excluding Transkei) Transkei Transvaal Natal Orange Free	- <u>3</u>		344 1,185 851 574 341	344 1,188 851 574 341
State Union	3		3,295	3,298
30th June, 1950— Cape Province. (excluding Transkei) Transkei Transvaal Natal Orange Free State	- <u>8</u> -		430 1,344 937 639 429	430 1,352 937 639 429
Union	8		3,779	3,787
30th June, 1951— Cape Province (excluding Transkei) Transvaal Natal Orange Free State	7 11		528 1,529 1,035 724 528	528 1,536 1,035 735 528
Union	18		4,344	4,362
31st December, 1951— Cape Province (excluding Transkei) Transvaal Natal Orange Free State			582 1,692 1,089 820 582	582 1,692 1,089 820 582
Union			4,765	4,765
31st December, 1952— Cape Province (excluding Transkei) Transkei Transvaal Natal Orange Free	$\frac{-4}{26}$	_ _ _	594 1,889 1,315 1,026	594 1,893 1,315 1,052
State	_		635	635
Union	30		5,459	5,489

TABLE II (3) (a).—MALARIA.

Huts treated with Residual Insecticides.

Year.	Transvaal.	Natal.
1947–48. 1948–49. 1949–50. 1950–51.	281,907 329,494 429,537 356,819 320,785	64,694 49,373 108,930 106,930 66,897

TABLE II (3) (b).—VECTORS FOUND IN CHECK SPRAYING.

	Huts (			etors en.	Ratio of Vectors per Hut.		
	Trans- vaal.	Natal.	Trans- vaal.	Natal.*	Trans- vaal.	Natal.	
1947–48 1948–49 1949–50 1950–51 1951–52	178,754 132,035 211,899 168,812 157,063	32,220 36,970 33,435	12,652 8,285 1,572	3,388 2,873 1,383	1:25·6 1:107	1:17·1 1:9·5 1:12·8 1:16·7 1:22·2	

<sup>\*</sup> Natal adult vectors identified from uncontrolled areas in Maputaland.

Table II (3) (c).—Table showing number of Positive Smears Examined.

	Transvaal.	Natal.	Total.
1942–43. 1943–44. 1944–45. 1945–46. 1946–47. 1947–48. 1948–49. 1949–50. 1950–51. 1951–52.	2,396 3,980 1,831 1,263 384 441 128 61 41	359 234 142 450 134 87 94 134 80 35	2,755 4,214 1,973 1,713 518 528 222 195 121 54

TABLE II (4) (a).—SUMMARY OF DISTRIBUTION OF HUMAN PLAGUE.

	18.						
1/12/52.	Deaths.		111		-	3	
YEAR ENDED 31/12/52.	Cases.				-	5	
YEA	Out- breaks.	11111111	111	-	[-]	3	
31/12/51.	Deaths.			m	۳	13	
Рекиор 1/7/50 то 31/12/51.	Cases.	.	-	1   4   1	9	26	
PERIOD	Out- breaks.	.       .	-	1   2   1	-	12	
/6/50.	Deaths.	000	-111		1.6.	27	
YEAR ENDED 30/6/50.	Cases.		111		1-2-	44	
YEAF	Out- breaks.	1   1   1   1   1   1   1   1   1   1	[ ] [			33	
/6/49.	Deaths.	2       4   60     61   2   1	[77]	2	-	30	
YEAR ENDED 30/6/49.	Cases.	2	4		9	55	
YEAF	Out- breaks.	-	1-1	%	2	27	
/6/48.	Deaths.		7   7	60     4	"	25	
YEAR ENDED 30/6/48.	Cases.	- - 4 4    0  1	0 0	0	%	42	
YEAF	Out- breaks.	- - 0 - 0 -	-   -	2     1	4	17	
		Cape Province— Aliwal North. Barkly West. Beaufort West. Carnarvon Cathcart Glen Grey Cordonia. Hay. Kuruman Maraisburg. Port Elizabeth. Postmasburg. Queenstown. St. Marks. Uitenhage. Vryburg.	Transvaal— Johannesburg Potchefstroom Ventersdorp	Orange Free State— Bethulie Bothaville Dewetsdorp Fauresmith Heilbron Koppies	KroonstadTadybrandThaba 'Nchu	TOTAL	

Table II (4) (b).—Distribution of Human Plague among the Districts of the affected Provinces during the Year ending 30 June, 1948.

	Number of	Euro	PEAN.	Non-Eu	JROPEAN.	To	ΓAL.
	Outbreaks.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cape— Barkly West. Carnarvon. Glen Grey. Hay St. Marks. Williston.	1 1 2 1 2 1			1 1 4 4 8 1	1 1 3 3 3 1	1 1 4 4 9 1	1 1 3 3 3 1
TOTAL	8	1		19	12	20	12
Transvaal— Johannesburg Ventersdorp	1 1	. <del>2</del>	<u>1</u>	<u> </u>		2 5	1 2
TOTAL	2	2	1	5	2	7	3
Orange Free State— Bothaville Heilbron Vredefort	2 1 4	<u>2</u> 1	2	1 7 4	1 4 3	3 7 5	3 4 3
TOTAL	7	3	2	12	8	15	10
Union	17	6	3	36	22	42	25

Table II (4) (b) (continued).—Distribution of Human Plague among the Districts of the affected Provinces during the Year ending 30 June, 1949.

	Number of Outbreaks.	European.		Non-Eu	JROPEAN.	To	Total.		
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Cape— Aliwal North Glen Grey Kuruman Hay Postmasburg Queenstown Uitenhage Williston	1 2 9 2 2 1 1 1	_ _ _ _ _		2 7 11 7 7 1 2	2 4 9 3 3 1 2	2 7 11 7 7 1 2	2 4 9 3 3 1 2		
Total	19	—		38	25	38	25		
Transvaal— Potchefstroom	1	1		3	. 2	4	2		
Orange Free State— Koppies Vredefort	5 2		=	7 6	2	7 6	2 1		
TOTAL	7			13	3	13	3		
Union	27	1		54	30	55	30		

Table II (4) (b) (continued).—Distribution of Human Plague among the Districts of the Affected Provinces during the Year ending 30th June, 1950.

	Number of	Euro	PEAN.	Non-Eu	JROPEAN.	То	TAL.
	Outbreaks.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cape— Gordonia Hay Kuruman Vryburg Total	7 2 13 3 25	1 1 2		7 7 12 4 30	2 6 7 3	8 7 13 4	2 6 8 3
Orange Free State— Bethulie. Bothaville. Dewetsdorp. Fauresmith. Heilbron. Ladybrand. Thaba 'Nchu. Vredefort.	1 1 1 1 1 1 1	 		1 1 1 1 1 5 1	1 1 1 1 1 3	1 1 1 1 1 1 5	1 1 1 1 1 1 3
TOTAL	8	1		11	8	12	8
Union	33	3	1 .	41	26	44	27

Table II (4) (b) (continued).—Distribution of Human Plague among the Districts of the Affected Provinces during the Period 1st July, 1950 to 31st December, 1951.

	Number of	Euro	European.		UROPEAN.	To	TAL.				
	Outbreaks.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.				
Cape Province— Barkly West Beaufort West Cathcart Maraisburg	3 1 1 1	_ _ _	<u>-</u>	6 3 2 2 2	2 2 2	6 3 2 2	2 2 2				
Тотац	6			13	6	13	6				
Transvaal— Johannesburg	1			1	1	1	1				
Orange Free State— Bothaville Fauresmith Koppies Kroonstad	1 2 1 1	Ξ		1 4 1 6	$\frac{}{3}$	1 4 1 6	$\frac{}{3}$				
Тотац	5		_	12	6	12	, 6				
Union	12		-	26	13	26	13				

Table II (4) (b) (continued).—Distribution of Human Plague among the Districts of the Two Affected Provinces during the Year ended 31st December, 1952.

	Number of Outbreaks.	Cases.	Deaths.
Cape Province— Port Elizabeth	1	3	2
Orange Free State— Thaba 'Nchu. Heilbron.	1 1	1 1	1

Table II (5) (a).—Monthly Incidence of Reported Cases of Acute Poliomyelitis.

	Ca	PE.	Na	ΓAL.	Trans	VAAL.		E FREE	Un	ion.	n 1
Month.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Euro- pean.	Non- Euro- pean.	Remarks.
July				_ _ _ _	1 2 2 4 3 8		_ _ _ _ 1		1 3 6 4 8 20	-6 1 2 7	Total for six months. European 42 Non-European. 18
1948— January February March April May June July August September October November December	13 7 7 15 13 6 4 2 2 1 4 3	4 4 6 26 16 3 2 9 1 3 3 7	5 7 20 60 33 17 16 3 4 1 2 2	1 6 12 73 43 25 12 14 6 3 2	48 173 351 359 98 9 15 12 3 4 3 7	28 41 112 137 45 10 12 6 3 4 8	2 3 19 36 28 9 1 — 6 3 4	2 3 9 36 31 2 3 1 2 2 -	68 190 397 470 172 41 36 17 15 9 13	35 54 139 272 135 40 29 30 12 12 13 17	Total for 1948. European 1,440 Non-European 788
January February March April May June July August September October November December	4 4 1 3 4 6 2 1 1 5 4 2	6 5 6 2 2 4 1 4 — 1 2 2	1 1 2 2 2 - 13 - - 1 2 3 2	3 -2 7 6 15 -1 2 -1 -1	5 10 · 16 24 39 45 5 1 5 9 2	2 4 1 6 17 20 — 5 1 — 5	4 1 2 3 3 3 9 — — — — — 2	4 4 7 2 4 — — 1 1	14 16 21 32 46 73 7 2 7 16 9	15 13 13 22 27 43 1 5 7 3 4 7	Total for 1949. European 254 Non-European 160
January February March April May June July August September October November December	2 -3 -1 2 4 1 1 1 2 3	1 — 2 — 2 — 2 — 3 3 2 3 3 5	7 — 1 5 — 1 — 1 2 5 1	-4 -1  -1  -1 -2 3	10 9 9 6 4 5 2 2 4 4 1 7	5 3 -1 - - - 3 -1 -1	- 1 - - 1 - - - - 1	1 1 - 1 1 - 1 - -	19 10 13 11 5 8 6 4 7 10 5	11 4 3 1 3 1 3 7 2 5 5	Total for 1950. European 108 Non-European 53
January February March April May June July August September October November December	6 1 2 2 1 10 6 3 1 — 6 12	7 8 1 6 5 1 4 — 1 — 3 4	1 1 - 1 - 1 - 4 8 19	1 1 3 — 1 — 1 3 1 2 12	4 77 13 8 11 11 6 5 3 12 62 90	2 -3 1 2 7 1 - 2 2 8 20	2 -2 3 -2 1 3 -3 -3 4	1 — 1 1 — 3 1 1 1 2 — 4 — —	12 9 18 13 12 24 13 11 4 19 80 121	11 9 8 8 7 12 6 2 8 3 17 36	Total for 1951. European 336 Non-European 127
January February March April May June July August September October November December	12 10 7 4 4 1 — — 3 1	2 4 1 2 4 - 1 2 1 1 3 5	4 8 8 2 2 2 — 1 1 — 1 —	2 7 10 2 4 — 4 2 — 1	30 23 21 4 2 4 — 2 1 2 1	5 2 3 4 5 3 — — — — 2 —	7 6 5 2 2 2 — — — — — 1 —	1 -1 1 -1 -1 -1 -1 1 1	53 47 41 12 10 5 — 3 2 2 6 1	10 13 15 9 13 4 5 4 1 1 6 7	Total for 1952. European 182 Non-European 88

TABLE II (5) (b).—Acute Poliomyelitis: Number of Cases Notified and their Distribution since 1934.

Period.	CA	PE.	NA	TAL.	Transvaal.		Orange I	Union.	
Year Ending.	European. Non- European.		European.	Non- European.	European.	Non- European.	European.	Non- European.	Total.
30/6/1934 30/6/1935 30/6/1936 30/6/1937 30/6/1938 30/6/1940 30/6/1941 30/6/1942 30/6/1943 30/6/1945 30/6/1945 30/6/1947 30/6/1948 30/6/1949 30/6/1950 30/6/1951 Six months to— 31/12/1951 31/12/1952	13 23 7 19 4 9 11 16 16 10 6 183 40 11 79 38 23 34	16 22 9 10 2 16 20 14 6 3 6 211 43 20 70 50 14 46	2 1 4 4 6 10 12 5 126 8 6 144 47 16 12 31 27	2 3 -1 3 1 1 1 6 168 30 13 162 74 9 13	15 9 2 29 4 — 19 39 14 9 41 420 66 16 1,058 183 70 74 178 90	3 4 5 2 5 1 1 2 12 4 1 10 122 20 10 375 87 20 19	15 1 	5 ————————————————————————————————————	67 61 26 82 18 34 62 92 51 36 75 1,380 217 79 2,073 550 161 215

Table II (5) (c).—Acute Poliomyelitis: Notifications and Deaths. Reported during the Year ended 31st December, 1952.

,		Colour- ed.			16		
	.v.	Asiatic.			2		-
	Union.	Native.		021180444   144	70		
		Euro-		53   10   10   2   2   6	182		
	ម្នាំ	Colour-ed.		1111111111			
9	ORANGE FREE STATE.	Asiatic.				1	
ġ.	ORANGE ]	Native.		-     -	9		1111111111
1952.		Euro-		79877	23		
31st December, 1952.		c. Colour- ed.			2		
31ST DEC	Transvaal.	e. Asiatic.				_	
THE YEAR ENDED	TR	Native.	SES.	400000         2	22	THS.	
YEAR		Euro- pean.	CASES.	300 223 30	06	Деатна.	
		Colour-ed.			2	_	
REPORTED DURING	Natal.	. Asiatic.			2	_	
REPOR	Z	Native.		21,00,4   40	28		
		Euro- pean.		488877   11   1	27	_	
		Colour-ed.			12		
	CAPE PROVINCE.	Asiatic.			I		
	CAPE P	Native.		26.13	14	_	
		Euro- pean.		100 100 110 110 110 110 110 110 110 110	42		
	Maand.			January. February. Rebruary. March. April. May. June. July. August September. October. November.	Тотаг		January February March April. May June July. August September October November December.

TABLE II (5) (d).—Acute Poliomyelitis: Distribution of Cases and Deaths—By Race and Age.

Reported during the Year ended 31st December, 1952.

				Cases.						D	EATHS.			
Paraina			AGE.				Inci-			AGE.				Death
Province.	Under 1 Year.	1–4.	5–9.	10–19.	20—*.	Total Cases.	dence Rate per 100,000 of Popu- lation.	Under 1 Year.	1–4.	5–9.	10–19.	20—*.	Total Deaths.	Rate per 100,000 of Popu- lation
	'				Et	JROPEAN.								
Cape Province	4 2 3 2	13 5 30 11	10 7 29 6	10 5 15 2	5 8 13 2	42 27 90 23	4·43 9·61 7·30 9·87	=	=	=	=		= -	0.21
Union	11	59	52	32		182	6.75					2	2	0.07
					1	NATIVE.								
Cape Province	5 6 2	5 12 7 3	2 4 5 1	2 5 2 2		14 28 22 6	0·56 1·53 0·62 0·75	<u>1</u> _	=		= -	<u>-</u>	$\begin{array}{ c c }\hline 1\\\hline 3\\1\\\hline \end{array}$	0·04 0·08 0·12
Union	13	27	12	11	7	70_	0 · 80	1		2	1	1	5	0.06
					A	ASIATIC.								
Cape Province	=						0·65 — 0·53	=	=		=	=	= = = = = = = = = = = = = = = = = = = =	
				1	Co	LOURED.								
Cape Province	2 	7 1 2 - 10	2 	1 1 - 2	=	12 2 2 —	1·19 6·06 2·53 —	=	=	2 	=		2	0.20
				1	TOTAL	(ALL RA	CES).				1	1	<u> </u>	
				1	Ī	<u> </u>	1			1 -	1			0.11
Cape Province	11 8 5 2	25 19 39 14	14 12 34 7	13 11 17 4	5 9 19 2	68 59 114 29	1·51 2·41 2·32 2·76	1  -	=	$\frac{2}{2}$		$\frac{2}{1}$	$\begin{array}{c} \frac{5}{3} \\ 1 \end{array}$	0·11 0·06 0·10
Union	26	97	67	45	35	270	2 · 10	1		4	1	3	9	0.07

<sup>\*</sup> Includes cases where age is not specified.

TABLE II (5) (e).—Acute Poliomyelitis: Distribution of Cases and Deaths by Race and Area. Reported during the Year ended 31st December, 1952.

REPORTE	DURING	THE LEA	R ENDED	31ST DECEN	MBER, 193			
		C	ASES.			Di	EATHS.	
Province.	Urban.	Rural.	Total	Incidence Rate per 100,000 of Population.	Urban.	Rural.	Total.	Death Rate per 100,000 of Population
		Eur	ROPEAN.					
Cape Province. Natal. Transvaal. Orange Free State.	28 23 73 7	14 4 17 16	42 27 90 23	4·43 9·61 7·30 9·87	1 	1 - -	2	0.21
Union	131	51	182	6.75	1	1	2	0.07
/			Native.					1
Cape Province. Natal. Transvaal. Orange Free State.	8 8 13 1	6 20 9 5	14 28 22 6	0·56 1·53 0·62 0·75	$\frac{1}{3}$	— — — 1	$\frac{1}{3}$	0·04 
Union	30	40	70	0.80	4	1	5	0.06
		F	Asiatic.					
Cape Province. Natal Transvaal Orange Free State		=		0.65				=
Union	2 .	_	2	0.53				_
		Сог	OURED.					1
Cape Province	8 1 2 —	4 1 —	12 2 2	1·19 6·60 2·53	2 	=	<u>2</u> 	0.20
Union:	11	5	16	1 · 40	2		2	0.18
,	'	Total (A	LL RACES).	,				
Cape Province	44 34 88 8	24 25 26 21	68 59 114 29	1·51 2·41 2·32 2·76	4 3	1 - 1	5 -3 1	0·11  0·06 0·10
-	174	96	270	2.09	7			

TABLE II (6) (a).

Pakies (Human Contacts)	1/7/49 to	30/6/50.	1/7/50 to	30/6/51.	1/7/51 to	31/12/51.	1/1/52 to 31/12/	
Rabies (Human Contacts).	European.	Non- European.	European.	Non- European.	European.	Non- European.	European.	Non- Europear
ransvaal—	1			1	5	_	2	1
Wolmaransstad								
Pretoria		_	2	_		_		
Pietersburg		_	1	1			_	
Brits	1	_	<u> </u>			_	_	_
Volksrust	4	-8				_	<u> </u>	_
Middelburg	1	<u> </u>	<del></del>	_	<u> </u>	_	_	_
Ventersdorp	1	_	_			_	_	_
Lichtenburg	1	_	11	7		10		6
ZoutpansbergChristiana			2	1		10		
Vereeniging			ī				_	
Louis Trichardt	_	_	î		2		5	3
Potgietersrust		_	2 2	_	_	2	4	2
Delareyville	_	_	2	2		1	4	4
Tzaneen		_	1	_	_		1	3
Letaba	I -	_		1	2	5	_	_
Amersfoort	II -	_	1	_	_		_	
Maraisburg	_						1	
Leeudoornstad							2	2
KlerksdorpMessina		_			_		1	ĩ
Heidelberg		_	_	_		_	1	1
	1							
Prange Free State—	1			1				
Reitz		32	_	_	-	_		
Lindley	1	_	_	_		_	1	1
Brandfort		1	_			_	_	_
Ventersburg		_		_	_	_		
Petrusburg					_			
Bethlehem		2	1		_ (		_	· _
Hoopstad		3		_	_	1	_	
Kroonstad	ĭ	5					_	
Marquard			_			_	_	_
Lindley		_	_	_		_	1	1
Bloemfontein			1	1		22	_	_
Bothaville		-		_			_	_
Senekal	1	<u> </u>	_	_	_	1	_	_
Boshof		_	1	1	_			_
Koppies		_	2 2 2	1	_		1	_
Odendaalsrus		_	2	_				
WinburgBethulie						2	_	_
Jacobsdal		"	_		1		2	_
Philippolis				_		_	2	_
Edenburg			_	_	_	_	<u> </u>	2
					0			
Cape Province—								
Middelburg	2	_	_	_		1		1
Williston		1	_	_	_		1	
De Aar		1	3	3				
MafekingGraaff-Reinet			3	$\begin{vmatrix} 3 \\ 2 \end{vmatrix}$			_	
Upington		_	_		_	1	_	_
Steynsburg		_		_	_	1	_	_
Prieska	-	_	—	—	_	_	1	_
Vryburg		2	3	1	_	-	5	-
Jatal—	1	1						
Nqutu	1	1						
	10	<u> </u>	, , , , ,		1	,	1	
		ABLE II (6)	(a) (conti	inued).				
Known Number of Cases of Rai 31/12/52 (Humans	oies from 1/0	6/49 to		Anim	als responsib	ole for Tran	smission.	
				Domas	tic cat		2	
		• • • • • • • • • •	•		· · · · · · · · · · · · · · · · · · ·			
				Meerca	ıt			
					t			
				Donke	у	• • • • • • • • • • • • • • • • • • • •	1	
ABLE II (7).—THE PROVINCIAL INC	CIDENCE OF	SMALLPOX THE FOLLO	CASES DI	URING THE	YEARS U	NDER REV	IEW IS IND	ICATED :
		THE FOLLO	WING TAI	J.		Jul	y, 1950-	
Province.	1945–46.	1946-47.	1947–48.	1948-	49. 1949-	-50. Dec	ember,	1952.
1101111301							1951.	
			.				640	
Cape	482	353	183	62		20	648	2
Natal	412	284	8	950		107	44	74
ransvaal	333	283	68	859		390 18	699	74 4
Prange Free State	44	58	12	14		10	10	7
	1 271	078	271	96	7 1 1 6	535	1 434	80

978

1,271

271

967

1,635

1,434

TABLE II (8).—DEATHS FROM TUBERCULOSIS (ALL FORMS) BY RACE, SEX AND AGE.

		Total.	57 144 43 88 88 86 101	366	2000		25 25 26 64 64 33 27 21	329		919 331 786 679 483 359 225	3,949	
	1951.	Female.	23 22 23 23 23 23 23	207			23 60 119 119 120 133	175		445 187 474 474 162 106 55	1,818	
		Male.	33 12 12 13 13 13 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	359			23 10 33 31 10 10 15	154		474 144 312 340 321 253 170	2,131	
		Total.	251 102 102 104 104	639			288 885 885 885 887 11	363		848 377 894 772 479 376 218	4,132	
	1950.	Female.	23 29 25 25 18 18	225			26 13 37 20 18 8 8	174		419 218 575 412 196 141 66	2,072	
		Male.	28 27 33 73 73 74 75	414			222 153 433 843 88 16	189		429 159 319 360 283 235 152	2,060	
		Total.	, 68 22 75 111 104 105 100	684			61 36 126 88 88 54 40 20	441		983 381 1,003 715 578 394 239 208	4,501	
	1949.	Female.	34 20 20 10 10 10 10	248			254 4 5 5 1 1 1 5 4 5 5 1 1 1 5 1 1 1 5 1 1 1 1	187		476 219 602 369 218 132 72	2,156	
		Male.	34 13 28 55 84 88 89 77	436			30 72 72 72 73 74 74 75 75 76 77 77 77 77 77 77 77 77 77 77 77 77	254		507 162 401 346 360 262 167 140	2,345	
٠		Total.	74 30 86 115 136 100 129	772		CS.	45 143 94 98 30 15	435	DS.	864 430 950 764 576 379 251 217	4,431	
EUROPEAN	1948.	Female.	45 12 52 61 61 19 19	284		ASIATICS	25 23 26 26 26 27 4 4	215	COLOUREDS	256 256 582 405 204 127 81	2,162	
		Male.	29 18 34 34 54 75 110 81	488		u	20 11 74 74 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	220		446 174 368 359 372 252 170	2,269	
		Total.	72 11 129 129 120 120 88	773			136 136 96 70 35 17	440		742 333 974 841 619 395 253	4,347	
	1947.	Female.	32 9 80 60 50 22 14	266			20 15 70 70 38 38 13 13	216		345 195 605 605 430 273 116 78	2,104	
		Male.	40 45 69 81 98 98 74	507			27 66 66 72 33 11 11	224		.397 138 369 411 346 279 175	2,243	
		Total.	84 33 85 116 120 128 111	773			40 43 109 109 54 38 30 16	473		670 378 900 787 566 390 318	4,164	
	1946.	Female.	43 50 62 62 72 72 73	287			25 71 71 71 71 71 71 74 74 74 74 74 75 76 76 76 76 76 76 76 76 76 76 76 76 76	199		322 181 536 402 240 125 98 45	1,949	
		Male.	41 15 35 35 71 107 89 74	486			19 72 72 68 36 36 24 26	274		348 197 364 385 326 220 110	2,215	
		Total.	52 24 79 128 122 136 116 101	758			44 161 123 123 64 32 28 11	504		709 414 893 759 581 387 233 163	4,139	
	1945.	Female.	21 13 148 148 147 178 189 189	273			28 25 73 27 6 6	225		362 237 512 413 233 128 68 48	2,001	
		Male.	31 11 102 80 102 83	485			16 16 88 88 65 37 26 21 10	279		347 177 381 346 348 259 165	2,138	
Аме	Group in Years.		0- 4 5-14 15-24 25-34 35-44 45-54 55-64	TOTAL	-		0- 4 5-14 15-24 25-34 35-44 45-54 55-64	TOTAL		0- 4. 5-14. 15-24. 25-34. 35-44. 45-54. 55-64.	TOTAL	

Table II (9).—Typhoid or Enteric Fever: Distribution of Cases and Deaths (Race and Area).

Reported during the Period 1st July, 1947 to 30th June, 1948.

		CA	ASES.			DEAT	THS.	
Province.	Urban.	Rural.	Total.	Annual Incidence Rate per 100,000 of Population.	Urban.	Rural.	Total.	Death Rate per 100,000 of Population
		Euro	PEANS.					
Cape (including Transkei)	96 31 217 27	34 18 38 34	130 49 255 61	14·54 19·60 22·89 28·91	7 2 11	1 1 1	8 3 12 —	0·89 1·20 1·08
Total	371	124	495	20.05	20	3	23	0.93
		Na	ATIVE.					
Cape (including Transkei)	95 122 273 73	244 372 196 74	339 494 469 147	14·20 28·37 14·48 21·00	14 27 63 6	3 21 8 1	17 48 71 7	0·71 2·76 2·19 1·00
Total	563	886	1,449	17.96	110	33	143	1 · 77
		As	IATIC.					
Cape (including Transkei)	2 69 5 —		124 9 —	12·50 49·01 21·95	_ 8 	_ _ _	_ 8 _ 8	3.16
TOTAL	76	59	135	43.55	8		8	2.58
		Сог	OURED.					
Cape (including Transkei)	111 18 13	105 7 1	216 25 14 —	24·66 92·59 21·54	7 —	9 2 —	16 3 —	1·83 11·11 —
TOTAL	142	113	255	25.97	8	11	19	1.93
		TOTAL (A	ALL RACES)	•		'		
Cape (including Transkei)	304 240 508 100	383 452 239 108	687 692 747 208	16·46 30·47 16·73 22·49	28 38 74 6	13 24 9 1	41 62 83 7	0.98 2.73 1.86 0.76
Total	1,152	1,182	2,334	19.73	146	47	193	1.63

Table II (9) (continued).—Typhoid or Enteric Fever: Distribution of Cases and Deaths (Race and Area Reported during the Period 1st July, 1948 to 30th June, 1949.

REPORTED DU	TRING THE	TERIOD I	SI JULY,	1940 10 3	OTH JUNE	, 1949. 		
		C	Cases.			DEA	ATHS.	
Province.	Urban.	Rural.	Total.	Annual Incidence Rate per 100,000 of Population.		Rural.	Total.	Death Rate per 100,000 o Population
		Eur	OPEANS.					
Cape (including Transkei). Natal. Transvaal. Orange Free State.	68 54 280 27	26 15 70 10	94 69 350 37	10·33 26·64 30·43 17·05	3 3 14	1 2 1	4 5 15 —	0·44 1·93 1·30
TOTAL	429	121	550	21 · 69	20	4	24	0.95
		N	ATIVE.		,			
Cape (including Transkei). Natal Transvaal. Orange Free State.	161 174 471 127	175 333 370 76	336 507 841 203	13·91 28·81 25·42 28·08	18 28 77 5	6 24 36 4	24 52 113 9	0·99 2·98 3·41 1·24
Total	933	954	1,887	22.99	128	70	198	2.41
		Ası	IATIC.					
Cape (including Transkei). Natal. Transvaal. Orange Free State.	58 13	1 44 3 —	3 102 16	18·75 38·35 36·36	_ 3 3	_ 1 1	_ 4 	1.50
Total	73	48	121	37·12	3	1	4	1 · 23
		Col	OURED.		•	,		
Cape (including Transkei). Natal Transvaal Orange Free State	96 19 24	77 6 2	173 25 26	19·09 89·29 38·24	14 1 6	10 2	24 1 8	2·65 3·57 11·76
Total	139	85	224	22.05	21	12	33	3 · 25
		Total (	ALL RACES	s).				
Cape (including Transkei). Natal Transvaal. Orange Free State.	327 305 788 154	279 398 445 86	606 703 1,233 240	14·27 30·39 26·97 25·16	35 35 97 5	17 27 39 4	52 62 136 9	1·22 2·68 2·98 0·94
Тотац	1,574	1,208	2,782	23 · 20	172	87	259	2.14

Table II (9) (continued).—Typhoid or Enteric Fever: Distribution of Cases and Deaths (Race and Area).

Reported during the Period 1st Jult, 1949 to 30th June, 1950.

KEFORTED DO			,					
		C	ASES.			DEA	ATHS.	
Province.	Urban.	Rural.	Total.	Annual Incidence Rate per 100,000 of Population.	Urban.	Rural.	Total	Death Rate per 100,000 of Population.
		Eur	ROPEAN.					
Cape (including Transkei)	88 42 198 37	54 11 63 15	142 53 261 52	15·38 19·81 22·18 23·42	1 1 6 1	1 1 2	2 2 8 1	0·22 0·75 0·68 0·45
TOTAL	365	143	508	19.62	9	4	13	0.50
		N	ATIVE.	1		ı	1	1
Cape (including Transkei) Natal Transvaal. Orange Free State.	297 199 601 208	629 382 390 146	926 581 991 354	37·46 32·68 29·33 47·45	59 39 38 3	6 38 25 10	65 77 63 13	2·66 4·33 1·86 1·74
TOTAL	1,305	1,547	2,852	34.17	139	79	218	2.61
		A	SIATIC.	1			1	1
Cape (including Transkei) Natal Transvaal. Orange Free State	— 118 14 —	4 92 5 —	210 19 —	23·53 75·63 41·30	— 6 1		9 1 1	3·23 2·17
Total	132	101	233	68 · 13	7	3	10	2.92
		Сог	OURED.	'				
Cape (including Transkei)	92 5 14 9	83 5 7 2	175 10 21 11	18·70 34·48 29·58 78·57	$\frac{10}{2}$	· _ 2	——————————————————————————————————————	1·28 — 7·14
TOTAL	120	97	217	20.67	11	2	13	1 · 24
		Total (A	All Races)					1
Cape (including Transkei) Natal Transvaal. Orange Free State	477 364 827 254	. 770 490 465 163	1,247 854 1,292 417	28·86 36·29 27·64 42·46	70 46 45 5	9 42 27 10	79 88 72 15	1 · 83 3 · 74 1 · 54 1 · 53
Total	1,922	1,888	3,810	30.90	166	88	254	2.06

Table II (9) (continued).—Typhoid or Enteric Fever: Distribution of Cases and Deaths (Race and Area).

Reported during the Period 1st July, 1950 to 31st December, 1951.

REFORTED DORE		ERIOD IDI	0021, 12		1 B B C B III B	2.1, 2.011		
		C.	ASES.			DEA	THS.	
Province.	Urban.	Rural.	Total.	Annual Incidence Rate per 100,000 of Population.	Urban.	Rural.	Total	Death Rate per 100,000 of Population
		Eur	ROPEAN.					
Cape (including Transkei). Natal. Transvaal. Orange Free State.	94 50 221 41	57 31 55 28	151 81 276 69	10·73 19·63 15·19 20·09	3 1 —	- 1 1 1	3 2 1 1	0·21 0·49 0·05 0·29
Total	406	171	577	14.50	4	3	7	0.17
		N	ATIVE.	, , , ,				
Cape (including Transkei). Natal. Transvaal. Orange Free State.	120 284 1,247 89	559 858 344 268	679 1,142 1,591 357	18·18 42·09 30·38 30·47	22 67 84 8	20 86 18 13	42 153 102 21	1·13 5·64 1·95 1·79
Тотац	1,740	2,029	3,769	29.31	181	137	318	2.47
		As	HATIC.	1		,		1
Cape (including Transkei). Natal. Transvaal. Orange Free State.	2 78 26	1 179 2	257 28 —	11·11 53·53 38·09	9 	_ <sub>7</sub> _	— — —	3.45
Total	106	182	288	52·17	9	7	16	2.90
		Col	OURED.					1
Cape (including Transkei) Natal Transvaal. Orange Free State.	126 7 36 4	167 23 1	293 30 37 4	19·81 62·50 32·45 17·78	17 1 1	- 8 - 3	25 4 1 1	1·69 8·33 0·88 4·44
Total	173	191	364	21 · 88	20	11	31	1.87
		Total (A	All Races)	•	1			
Cape (including Transkei)	342 419 1,530 134	784 1,091 402 296	1,126 1,510 1,932 430	16·94 41·65 26·68 27·97	42 78 85 9	28 97 19 14	70 175 104 23	1·05 4·81 1·43 1·49
Total	2,425	2,573	4,998		214	158	372	1.95

TABLE II (9) (continued).—Typhoid or Enteric Fever: Distribution of Cases and Deaths (Race and Area).

Reported during the Year ended 31st December, 1952.

		CA	ASES.			DEAT	гнѕ.	
Province.	Urban.	Rural.	Total.	Incidence Rate per 100,000 of Population.	Urban.	Rural.	Total	Death Rate per 100,000 of Population.
		Eur	OPEAN.					
CapeNatal	72 42 136	55 12 71	127 54 207 47	13 · 40 19 · 22 16 · 79 20 · 17	$-\frac{1}{6}$	_ _ _	$-\frac{1}{6}$	0·11 — 0·49 0·43
Orange Free State	24	161	435	16.14	7	1	8	0.30
		N	ATIVE.					
Cape Natal Transvaal Orange Free State	91 192 609 104	412 769 696 179	503 961 1,305 283	19·98 52·66 36·71 35·29	11 23 49 3	9 41 33 3	20 64 82 6	0·80 3·51 2·31 0·75
Total	996	2,056	3,052	35.08	86	86	172	1.98
		A	SIATIC.					
Cape Natal Transvaal Orange Free State	58 4	76 1	134 5	43·37 9·80	_ 3 _ =	_ 1 _ =	4 	1.30
TOTAL	62	77	139	36.78	3	1	4	1.06
		Со	LOURED.					
Cape Natal Transvaal Orange Free State	85 5 25 —	106 3 5	191 8 30	18·87 24·24 37·97	$\begin{array}{c c} & \frac{2}{4} \\ & - \end{array}$	4   -	6 1 4	0·59 3·03 5·06
TOTAL	115	114	229	20.11	6	5	11	0.97
,		TOTAL	(ALL RACES	s).				
Cape Natal Transvaal Orange Free State	248 297 774 128	573 860 773 202	821 1,157 1,547 330	18·26 47·26 31·46 31·43	14 26 59 3	13 43 33 4	27 69 92 7	0·60 2·82 1·87 0·67
Total	1,447	2,408	3,855	29.86	102	93	195	1.51

TABLE II (10) (a).—TYPHUS: MONTHLY INCIDENCE ACCORDING TO PROVINCES.

			1		1		RDING TO		1	
	САР	t	1	TAL.	TRANS	ì	1	STATE.	1	IION.
1946—	· Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
July August September October November December	44 53 80 34 42 20	$\begin{array}{c c} - \\ \hline 1 \\ \hline 1 \\ \hline 3 \end{array}$	25 21 41 22 8 10	1 1 4 3 1	4 1 18 3 1	1 - - - -	7 - - - 1		80 75 139 59 51 31	2 2 5 4 1 3
1947— January February March April. May June. July August September	27 35 22 21 17 45 66 79 96	1 3 2 1 2 3 6 5	6 5 2 5 11 8 2 8 3	1  2 	1 1 1 1 - 1 18		2 - 5 - 2		35 41 25 32 28 53 70 88	2 3 2 1 4 3 6 5
October November December	145 58 46	2 4 4	10 10 7		16		3 1 2	_ _ _	117 160 75 55	5 4 2 6 4
1948— January. February. March. April. May. June. July. August. September. October. November. December.	49 19 35 31 13 45 10 20 27 20 15 8	3 8 2 1 1 — 4 1 1	3 7 5 6 6 7 1 8 4 3		1 2 4 18 8 3 	     	2 1 1 - 1 - 2 2 -		55 27 42 39 24 70 19 33 33 24 17 20	3 3 8 4 3 1 — 5 3 1
January February March April May June July August September October November December	14 8 7 7 6 16 15 8 9 19 26 13	- - 1 1 - - - 1	7 1 3 14 12 4 7 6 5 20 1		- - 3 7 1 - - 2	- - - - - - - - - -			21 11 12 21 21 27 24 16 26 41 29 18	3 2 1 1 1 1 1
January February March April May June July August September October November December	4 3 4 5 5 9 4 7 17 2 16 6	- 2 - - - - - - -	4 4 3 1 2 3 4 1 —	1	1 4 1 1 1 1 — 1 6 19	- - - - - - - - 1	5 1 4 3 4 2 1		14 8 11 7 12 16 5 15 18 5 22 26	1 2   1  1
January February March April May June July August September October November December	9 4 8 6 7 5 7 9 15 3 8 5	1 1 2 - - 5 - 1	- - 1 1 - - - 1 2	——————————————————————————————————————	1 1 3 1 1 4 —		1		11 5 8 9 7 11 9 16 3 10 7	1 1 2 - 5 1
January February March April May June July August September October November December	1 4 5 10 7 7 20 7 4 —	1 1 - 1 2 3 - -	- 2 1 - - - 4						3 4 8 10 8 7 26 7 5 3 17	1 1 - 1 2 3 - -

Table II (10) (b).—Number of Cases of Typhus in the Union from 1933 to 1952.

Paried year anding 20th June	Cape.	Natal.	Transvaal.	Orange Free	Uni	on.
Period year ending 30th June.	Сарс.		Transvaar.	State.	Cases.	Deaths.
1933 1934 1935 1936 1937 1938 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 July, 1950 to 31 December, 1951 1st January, 1952 to 31st December, 1952	1,649 1,905 2,898 835 694 822 1,067 635 616 1,472 2,687 5,247 2,473 559 440 682 158 81 138 75	208 207 224 33 89 19 81 84 9 38 66 85 180 155 164 74 67 22 10	25 208 429 457 46 53 93 60 44 16 145 254 190 78 12 53 26 35 39 13	243 3,636 3,275 280 178 88 32 62 45 20 21 37 66 18 10 13 8 20 9 3	2,125 5,956 6,826 1,605 1,007 982 1,273 841 714 1,546 2,919 5,623 2,909 810 626 822 259 158 196 98	302 662 998 284 168 168 424 146 176 359 521 2,600 566 40 32 49 15 5

TABLE II (10) (c).—TYHPUS: YEARLY INCIDENCE.

Year ended 30th June.	Province.	Cases.	Per Cent.	Deaths.	Case Death Rate per Cent.
1947	Cape Natal Transvaal Orange Free State.	440 164 12 10	70·29 26·20 1·91 1·60	17 11 3 1	4 7 25 10
	Totals	626	100.00	32	5
1948	Cape Natal Transvaal Orange Free State.  Totals.	682 74 53 13	82·97 9·00 6·45 1·58	43 · 4 2 — 49	6·30 5·40 3·77 — 5·96
1949	Cape. Natal. Transvaal. Orange Free State.	158 67 28 6	61·00 25·87 10·81 2·32	9 6 —	5·69 8·96 
	Totals	259	100.00	15	5.98
1950	Cape	119 60 11 31	53·4 27·1 5·0 14·5	4 1 1 2	3·36 1·66 9·09 6·45
	Union	221	100 · 00	8	3 · 57
Period 1/7/50 to 31/12/51	Cape	138 10 39 9	70·41 5·10 19·90 4·59	10 11	7·3 2·5 11·1
	Union	196	100.00	12	6.2
1/1/52 to 31/12/52	Cape Natal Transvaal Orange Free State	75 7 13 3	76·53 7·14 13·27 3·06	8 	10.67
	Union	98	100.00	8	8.16

TABLE III (1).—PORTS OF THE UNION: HEALTH MEASURES.

TABLE III (1).—FORTS OF II	ie Onion.	TIEALTH WIE	ASUKES.		
Item.	Cape Town.	Durban.	Port Elizabeth.	East London.	Total.
1047 40			1		
Vessels dealt with	1,492 406	1,505 652	835 9	647 1	4,479 1,068
Vessels disinfected— Consignments	86	18	1	3	108
Second-hand clothing, etc	138 81	115 109	_1	202	456 191
Number of exemption certificates issued—I.S.C	8	73		6	87
Rodents destroyed on vessels and in Dock Areas	2,790	8,151	400	2,654	13,995
Vessels dealt with	1 601	1,817	858	703	5,069
Cases communicable disease	1,691 319	659	15	— ·	993
Consignments	163	41	9	69	282
Second-hand clothing, etc	180 100	136 116	_	71 —	387 216
Number of exemption certificates issued—I.S.C	19 2,889	106 7,980	613	3,631	125 15,113 ·
	2,007	7,200	013	5,051	15,115
Vessels dealth with	1,723	1,690	888	647	4,948
Cases communicable disease	188	302	10	11	511
Consignments	135	237 59	_	<u></u>	372 144
Second-hand clothing, etc	74 99	91	_	. 38	228
Number of exemption certificates issued—I.S.C	31 3,047	113 6,717	536	2,121	144 12,421
1950–51.					
Vessels dealt with	1,874	1,591	894	691	5,050
Cases communicable disease  Vessels disinfected—	352	147	12	3	514
ConsignmentsSecond-hand clothing, etc.	125 210	118 262	7	3	253 472
Second-hand clothing, etc	97 28	103 103	_	_	200 131
Rodents destroyed on vessels and in Dock Areas	2,978	4,839	512	, 855	9,184
1st June to 31st December, 1951.				A. T.	- 11
Vessels dealt with	876 89	767 120	432	349	2,424 219
Vessels disinfected— Consignments.	134	16	6	3	159
Second-hand clothing, etc	178	18	_		196
Deratization fumigation: International Sanitary Convention  Number of exemption certificates issued: I.S.C	89 19	67		_	156 19
Rodents destroyed on vessels and in Dock Areas	1,551	3,243	285	421	5,500
1952.	1.450	1 201	. 015	900	4.561
Vessels dealth with	1,459	1,381 331	915	806 46	4,561 602
Vessels disinfected— Consignments	138	103	3	1	245
Second-hand clothing, etc	161	11	3	74	249
Deratization fumigation: International Sanitary Convention  Number of exemption certificates issued: I.S.C	85 29	124 119	_	_	209 148
Rodents destroyed on vessels and in Dock Areas	3,050	5,675	653	1,235	10,613

TABEL III (2).—MONTHLY TOTALS OF AIRCRAFT ARRIVING FROM OUTSIDE THE UNION AT THE SANITARY AIRPORTS OF THE UNION BETWEEN 1ST JULY, 1947 AND 31ST DECEMBER, 1952.

Year.	Month.	Palmiet- fontein.	Rand Air Port.	Vaal- dam.	Total.
1947	July August September October November	67 77 64 78 95 102	30 30 38 39 22 23	= = = =	97 107 102 117 117 125
	Total for six Months	483	182		665
1948	January February March April May June July August September October November	108 99 112 107 113 112 122 125 130 136 117 126	7 11 10 8 7 7 7 9 3 3 4 3 3	     8 8 9 8 4 5 9 12 14	115 110 122 123 128 128 139 132 138 149 132 143
	TOTAL FOR YEAR	1,407	75	77	1,559
1949	January February March April May June July August September October November December	126 119 109 122 125 118 129 127 109 116 113 122	3 3 3 5 7 7 4 4 4 5 3 6 3	14 13 12 13 13 13 14 13 12 14 13 14	143 135 124 140 145 138 147 144 126 133 132 139
	TOTAL FOR YEAR	1,435	53	158	1,646
1950	January February March April May June July August September October November December	108 105 119 117 116 121 111 119 116 124 143 143	2 6 10 10 7 7 5 5 8 3 4 6	14 8 8 12 14 8 9 9 9	124 119 137 139 137 136 125 133 133 136 149 149
	TOTAL FOR YEAR	1,442	73	102	1,617

Note.—The Flying Boat Service was suspended on 9th November, 1950 and Vaaldam ceased to function.

TABLE III (2) (continued).

Year.         Month.         Palmiet fontein.         Rand Air Port.         Total.           1951         January.         147         1         148           February         128         4         132           March.         146         5         151           April.         153         4         157           May.         155         4         159           June.         149         1         150           July.         155         6         161           August.         169         6         175           September.         159         1         160           October.         156         1         157           December.         156         1         157           December.         156         1         157           December.         156         3         159           February.         158         5         163           March.         176         1         177           April.         167         2         169           May.         148         3         151           June.         143         1	11				
February	Year.	Month.			Total.
1952 January 156 3 159 February 158 5 163 March 176 1 177 April 167 2 169 May 148 3 151 June 143 1 144 July 181 4 185 August 185 1 186 September 176 4 180 October 174 3 177 November 167 2 169 December 172 1 173	1951	February March April May June July August September October November	128 146 153 155 149 155 169 159 152 156	4 5 4 4 1 6 6	132 151 157 159 150 161 175 160 158 157
1952 January 156 3 159 February 158 5 163 March 176 1 177 April 167 2 169 May 148 3 151 June 143 1 144 July 181 4 185 August 185 1 186 September 176 4 180 October 174 3 177 November 167 2 169 December 172 1 173		TOTAL FOR YEAR	1,825	39	1,864
TOTAL TOTAL 2,000	1952	January February March April May June July August September October November December	156 158 176 167 148 143 181 185 176 174 167 172	4 1 4 3 2 1	163 177 169 151 144 185 186 180 177 169 173
		TOTAL FOR YEAR	2,003	30	2,033

Monthly	Average.	Daily.	Average.
1947	129 · 083 137 · 166 134 · 750 155 · 333	1947 1948 1949 1950 1951	3·603 4·216 4·509 4·430 5·107 5·569

Table III (3).—Annual Totals or Aircraft Arriving from Outside the Union at Durban Airports during the Years from 1st July, 1949 to 31st December, 1952.

Year.	From Lourenco Marques.	From further North via Lourenco Marques.	Total.
1949–50	158	56	214
1950–51	111	54	165
1951–52	51	24	75

Note.—Arrivals of aircraft at Durban from outside the Union commenced in 1949.

Table IV (1).—District Nursing Service Number of Nurses, Midwives, Non-European Nursing Assistants for the Period 1947–52 in respect of whom subsidies or Part-Refund of Salaries are paid, compared with the Totals as at 31st December, 1935.

WITH THE I	TOTALS AS							
Race.	PART-REFUNDS TO LOCAL AUTHORITIES AND CHARITABLE ORGANISATIONS UNDER SECTION 14 (a).							
	1935.	1947.	1948.	1949.	1950.	1951.	1952.	
European. Native. Coloured.	23 2	116 69 22	123 73 22	169 119 36	181 142 47	211 241 61	212 255 66	
ALL RACES	25	207	218	324	370	513	533	
	SUBSI	DIES TO PRI	VATE NURSE	s and Mid	WIVES UNDE	R SECTION 1	4 (b).	
Race.	1935.	1947.	1948.	1949.	1950.	1951.	1952.	
European Native		25	19	$\frac{16}{1}$	$\frac{18}{2}$	9 1	9	
Coloured	8	25	19	17	20	10	10	
Race.			AND STATUT		BODIES IN ]	ODIES CONT NATIVE AREA		
	1935.	1947.	1948.	1949.	1950.	1951.	1952.	
European. Native. Coloured.	11	109 2	5 102 3	12 125 5	12 157 3	13 189 4	16 205 4	
ALL RACES	11	115	110	142	172	206	225	
Race.	SUBSID	Subsidies to Private Nurses and Midwifes in Native Areas under Section 15 (b).						
			DEC.	rion 15 ( <i>b</i> ).		TIVE AREAS	UNDER	
	1935.	1947.	1948.	1949 .	1950.	1951.	UNDER 1952.	
European. Native. Coloured.	1935.	1947. 	1		1950. ————————————————————————————————————			
European	_		1948.	1949 .		1951.	1952.	
European. Native. Coloured.	3 - 3	56	1948. 1948. 43 44	1949 .	45 45	1951.	1952. 30 30 30	
European. Native. Coloured.	3 - 3	56	1948. 1948. 43 44	1949 .	45 45	1951.   32   32	1952. 30 30 30	
European. Native. Coloured.  ALL RACES.  Race.	3 3 	56 -56 -Refunds 1 1947.	1948.  1 43 — 44  TO PROVINCE	1949 .  48  48  AL ADMINIS	45 	1951.   32   32   DER SECTION	1952.	
European. Native. Coloured.  ALL RACES.  Race.	3 3 	56 56 -Refunds 1	1948.  1 43 — 44  10 PROVINCE  1948.	1949 .  48  48  AL ADMINIS	45 45 17 45 1950.	1951.   32   32   DER SECTION   1951.	1952. 30 30 13. 1952.	

TABLE IV (2).—NURSING, MATERNITY AND CHILD WELFARE SERVICES.

Summary of Work Done, 1st January 1952 to 31st December, 1952 (Northern Transvaal, 1st July, 1951 to 30th June 1952).

	DEPUTY CHIEF HEALTH OFFICERS REGIONS.					
	Northern Transvaal.	Southern Transvaal.	Natal.	Orange Free State.	Cape.	Cape Eastern.
Centres visited  Maternity hospitals and nursing homes visited  Lectures given  Private midwives inspected (qualified)—	128 49 5	106 56 3	128 39 1	71 38 12	103 33 —	<u>55</u>
European	64 6 11	97 5 43	10 1	63 }	(Nurses) 43 }	24 27
European	24 44 14	60 192 14	29 5 3	$\left\{\begin{array}{c} \frac{65}{16} \end{array}\right\}$	113 }	20 92 6
vices  Investigations conducted in respect of nursing services	5 14	478 16	247 50	283 20	513 81	394 6

TABLE V (1).—PATHOLOGICAL LABORATORIES: ANALYSIS AND EXAMINATIONS
YEAR ENDED 30th June, 1948.

Particulars.	GOVERNMENT S.A. INSTITUTE FOR M LABORATORIES. RESEARCH.				[EDICAL	East London Hospital Board.
	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.
Specimens examined for:—  (a) Government Departments—     Agriculture     Customs and Excise.     Defence (and Navy).     Education.     Finance.     Health (including Leper Institutions and Mental Hospitals).     Interior.     Justice (including Prisons).     Mines (including Miners, Phthisis).     Native Affairs.     Posts and Telegraphs.     Public Works.     S.A. Railways and Harbours.     Others.  Totals.  (b) General Hospitals (Provincial). (c) Local Authorities. (d) Medical Practitioners and Members of the Public. (e) Other Governments and other Administrations (f) Others.		936 593 — 24,562 2,768 960 — 5 4,485 — 34,309 25,361 12,410 44,463 4 4,169 86,407		372  23,748  495    184 24,799 24,912 24,307 3,763  52,982	142 	14,897  14,897  2  —  14,906  4,174  —  4,174
Manufactures and Issues:— Autogenous Vaccines	80   31,980 356 502,079   3,380 293		882 2,545,051 14,865 460,178 129,254 — 599,839 — 391 — —	62 —167 ——————————————————————————————————	63 — — — 8,000 —	

TABLE V (1) (continued).—PATHOLOGICAL LABORATORIES: ANALYSIS AND EXAMINATIONS.
YEAR ENDED 30th June, 1949.

	EAR ENDED	JOIH JUNE,	1949.			
Particulars.	Gover Labora		S.A. IN	S.A. Institute for Medical Research.		
	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.
Specimens examined for:—  (a) Government Departments—     Agriculture.  Customs and Excise.     Defence (and Navy).     Education.     Finance.     Health (including Leper Institutions and Mental Hospitals).     Interior.     Justice (including Prisons).     Mines (including Miners Phthisis).     Native Affairs.     Posts and Telegraphs.     Public Works.     S.A. Railways and Harbours.     Others.	1,261 331 - 21,625 - 608 - - 10 178 - 24,013	965 804 — 32,145 2,722 1,383 — — 3,206 —	5,092 	284 27,530 383 — — — — — — — — — — — — —	155 10,729 1,038 1,038 171 12,093	35,092 8 2 — — 9 — 35,112
<ul> <li>(b) General Hospitals (Provincial).</li> <li>(c) Local Authorities.</li> <li>(d) Medical Practitioners and Members of the Public.</li> <li>(e) Other Governments and other Administrations</li> <li>(f) Others.</li> </ul>	6,418 100,844 45,521 	16,478 13,541 44,938 7 5,310	217,587 93,365 30,476 13,700 30,005	28,485 26,013 3,856 —	8,805 2,996 — —	8,685 3,726 4,467 7
Totals	155,903	80,274	385,133	58,354	11,801	16,885
Manufactures and Issues:— Autogenous Vaccines	40 — — 73,400 450 6,656,973 — — 4,095 245		786 1,303,915 15,560 422,898 165,021 — 2,506,383 — 4,966 445 —	52 213 — — 1,300 — —	56    13,500  	111111111

Table V (1) (continued).—Pathological Laboratories: Analysis and Examinations (after 31st May, 1951 the Services at the East London Laboratory were conducted by the Provincial Administration).

Year Ended 30th June, 1950.

YE	AR ENDED 3	OTH JUNE,	1950.			
Particulars.		GOVERNMENT LABORATORIES.		STITUTE FOR M RESEARCH.	EDICAL	East London Hospital Board.
Tarticuluis.	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.
Specimens examined for:—  (a) Government Departments—	22,723 22,906 1,396 — — — — — — — — — — — — —	748 695 — 46,745 828 2,078 — — — 22 2,984 — 54,100	5,346  149,732 5,786 25,222  1,119 187,205 267,914	2 24,625 10,091 66 — — — — — — — — — — — — — — — — — —	43,085 15 ——————————————————————————————————	
(c) Local Authorities		15,768 44,910 6	97,948 35,876 9,457 424	26,112 7,557 —	3,836	1,696 — —
(f) Others	174,506	72,040	411,619	62,525	14,649	7,542
Manufactures and Issues:— Autogenous Vaccines	37,980     5,011		655 14,832 630,250 189,858 — 1,119,229 — 5,111 487 —	58 	36    14,500  	

Table V (1) (continued).—Pathological Laboratories: Analyses and Examinations. Year Ended 30th June 1951.

	EAR ENDED	- CONE	1751.			
Particulars.		Laboratories. Research.		East London Hospital Board.		
	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.
Specimens examined for:—  (a) Government Departments—	2,618  21,731  420  140  24,909  3,745 106,828 34,635	2,174 506 — 44,782 393 2,143 — 9 2,514 6,796 59,317 6,993 19,485 52,626	5,270	210 	354 — 13,855 — 226 2,532 — — — — 162 — 17,129 29,333 3,899 —	55,703 
Public	185	4,859	10,336 40,313		1,462	= -
Totals	162,665	83,963	503,437	74,758	34,694	5,440
Manufactures and Issues:— Autogenous Vaccines			568 534,013 17,073 491,169 218,607 — 787,196 — 4,875 830 —		11111111111	
	3,047		1		- 17	1500

TABLE V (1) (continued).—PATHOLOGICAL LABORATORIES: ANALYSES AND EXAMINATIONS.

SIX MONTHS ENDED, 31ST DECEMBER, 1951.

SIX IVION	THS ENDED,	JIST DECE	WIDER, 1991.			
Particulars.	GOVERNMENT S.A. INSTITUTE FOR MED RESEARCH.		EDICAL	East London Hospital Board.		
	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.
Specimens examined for:—  (a) Government Departments—			2,277 2,277 35,482 2,763 12,158 1,163 103,843 166,559 50,097 24,956 9,997 19,645 271,254	190 10,126 285 285 - - 33 10,634 16,259 14,235 7,732 - - 38,226	91	
Manufactures and Issues:— Autogenous Vaccines	1,582,025 5,252,080 —		287 ————————————————————————————————————	36 -307 - - 1,200 - - -	11    1,000   	

Table V (1) (continued).—Pathological Laboratories: Analyses and Examinations. Year Ended, 31st December, 1952.

Particulars.	GOVERNMENT S.A. INSTITUTE FOR MEDICAL RESEARCH.						Medical	EAST LONDON HOSPITAL BOARD.
	Cape Town.	Durban.	Johannes- burg.	Port Elizabeth.	Bloem- fontein.	East London.		
Specimens examined for:—  (a) Government Departments—	1,607 15,750 614 17,971 1,323 67,544 11,926 14,157 94,950	            	5,962 187,527 7,557 24,806 4,086 229,938 368,588 108,578 52,114 24,832 48,007 602,119	148  20,177  623   123 21,071 39,339 28,794 18,824  86,957	229			
Totals	94,950		602,119	86,957	37,399			
Manufactures and Issues:— Autogenous Vaccines			533 343,349 ————————————————————————————————————	102 — 1,375 — 2,400 — —	32 — — — — 3,000 — —			

TABLE V (2).—PATHOLOGICAL LABORATORIES: NUMBER OF EXAMINATIONS PERFORMED.

Period.	Laboratory.	Work done on behalf of Government Departments.	Work done on behalf of others.	Total Specimens.
1/7/47 to 30/6/48	Johannesburg. Cape Town. Durban. Port Elizabeth. East London. Bloemfontein.	160,129 20,696 34,309 24,799 14,906 10,772	328,151 86,201 86,407 52,982 4,174 11,652	488,280 106,897 120,716 71,781 19,080 22,424
	TOTAL	265,611	569,567	835,178
1/7/48 to 30/6/49	Johannesburg. Cape Town. Durban. Port Elizabeth. East London. Bloemfontein.	175,144 24,013 41,225 28,358 35,112 12,093	385,133 155,903 80,274 58,354 16,885 11,801	560,277 179,916 121,499 86,712 51,997 23,894
	Тотац	315,945	708,350	1,024,295
1/7/49 to 30/6/50	Johannesburg. Cape Town. Durban. Port Elizabeth. East London. Bloemfontein.	187,205 27,332 54,100 25,503 43,110 10,353	411,619 174,506 72,040 62,525 7,542 14,649	598,824 201,838 126,140 88,028 50,652 25,002
	Total	347,603	742,881	1,090,484
1/7/50 to 30/6/51	Johannesburg Cape Town Durban Port Elizabeth East London Bloemfontein	203,547 24,909 59,317 21,105 55,730 17,129	503,437 162,665 83,963 74,758 5,440 34,694	706,984 187,574 143,280 95,863 61,170 51,823
	Total	381,737	864,957	1,246,694
1/7/51 to 31/12/51	Johannesburg. Cape Town. Durban. Port Elizabeth. Bloemfontein.	103,843 	271,254 ————————————————————————————————————	375,097 
	Total	155,728	371,101	526,829
1/1/52 to 31/12/52	Johannesburg	229,938 17,971	602,119 94,950	832,057 112,921
	Port Elizabeth	21,071 19,559	86,957 37,399	108,028 56,958
(1)	Total	288,539	821,425	1,109,964

TABLE V (3).—PATHOLOGICAL LABORATORIES: NATURE OF EXAMINATIONS PERFORMED.

•	Johannes- burg.	Cape Town.	Durban.	Port Elizabeth.	East London.	Bloem- fontein.
1/7/47 to 30/6/48— Particular disease General bacteriological. Chemical. Parasitological. Pathological. Medico legal.	348,089 23,945 49,081 10,328 54,291 3,131	9 9,173 1,882 4,767 427 336 312	88,550 11,630 1,534 17,776 782 464	59,700 4,388 4,691 632 7,895 475	15,701 193 1,077 439 1,656	21,917 102 91 51 263
Тотац	488,865	106,897	120,736	77,781	19,066	22,424
1/7/48 to 30/6/49— Particular disease. General bacteriological. Chemical Parasitological. Pathological. Medico-legal.	381,001 29,301 67,130 10,596 68,761 3,488	174,125 1,964 1,172 — 1,079 404	96,013 15,690 1,923 19,665 3,342 567	67,765 5,715 4,746 519 9,604 360	42,405 1,332 3,452 133 4,676	23,045 87 154 30 578
Total	560,277	178,744	137,200	88,709	51,998	23,894

Table V (3) (continued).—Pathological Laboratorics: Nature of Examinations Performed.

	Johannes- burg.	Cape Town.	Durban.	Port Elizabeth.	East London.	Bloem- fontein.
1/7/49 to 30/6/50— Particular disease. General bacteriological. Chemical. Parasitological. Pathological. Medico-legal, etc.	414,139 38,044 87,584 12,021 85,614 3,253	43,208 1,517 129,973 235 1,202 2,638	81,376 19,505 18,904 18,792 1,276 599	63,668 5,428 7,214 440 10,739 559	43,084 1,098 2,750 7 7773	26,380 130 372 30 345
Total	640,655	178,773	140,452	88,048	47,712	27,257
1750 to 30/6/51— Particular disease. General bacteriological. Serological. Parasitological. Pathological. Haematological. Chemical. Miscellaneous.	114,276 51,256 283,907 19,347 17,050 89,195 96,984 4,849	36,872 1,622 130,013 252 1,482 11,131 4,310 1,892	20,529 76,926 16,102 3,077 6,758 8,136 11,752	68,192 5,664 — 371 11,568 — 9,698 490	54,802 504 328 7 907 2,017 2,377 90	32,386 3,673 ————————————————————————————————————
Total	676,864	187,574	143,280	95,983	61,032	51,781
1/7/51 to 31/12/51— Particular disease. General bacteriological. Serological. Parasitological. Pathological. Haematological. Chemical. Miscellaneous.	68,106 28,997 149,965 9,479 8,352 51,259 56,572 2,367	25,089 22,639 1,687 111 442 402 1,828 1,514	8,102 4,846 40,096 9,021 1,097 4,721 7,542 479	34,890 2,507 — 233 5,222 — 5,730 278	* * * * * * *	16,580 2,171 — 765 4,442 — 2,951
Total	375,097	53,712	75,904	48,860	*	26,909
1/1/52 to 31/12/52— Particular disease. General bacteriological. Serological. Parasitological. Pathological. Haematological. Chemical. Miscellaneous.	164,472 68,646 306,595 19,370 18,728 94,359 155,488 4,399	17,158 104,269 10,227 11,937		71,461 6,134 — 519 16,288 — 13,037 589	* * * * * *	35,149 4,064 1,358 8,956 7,399
Total	832,057	143,591	_	108,028	*	56,926

<sup>\*</sup> Service conducted by Provincial Administration.

## TABLE V (4).—GOVERNMENT VACCINE INSTITUTE, ROSE-BANK, CAPE.

Work carried out during the period 1st July, 1947 to 30th June, 1948:—

Number of calves vaccinated	20
Number of calves successful	20
Number of calves lymph rejected	5.
Amount of lymph obtained from 202	٥.
calves	11
calves	11
Average quantity per successful calf	58
Average number of tubes per successful	
calf	23
Average value per successful calf at 2d. per	
tube	£1
Total number of tubes manufactured	
during year ending 30th June, 1948	
(calf lymph)	4,
Amount of lymph discarded owing to out-	
break of lumpy skin disease in batch	7,4
Number of tubes issued during the above	
period	5,0
Value of lymph manufactured at 2d. per	- ,
tube (calf lymph)	£3
Value of lymph issued free at 2d. per tube.	£3
Number of tubes (approximate) on hand	
at the end of June, 1948 (calf lymph)	2,2
Revenue received by sales outside the	-,,,
Union	£7
	~ /

207. 202. 5.

> 118,960 c.c. 588 c.c.

23,520.

E196.

4,758,400.

7,400 c.c.

5,020,079.

£39,653. 6s. 8d. £33,122. 2s. 2d.

2,258,400.

£7,608. 4s. 0d.

## TABLE V (4) (continued).—GOVERNMENT VACCINE INSTITUTE, ROSEBANK, CAPE.

Work carried out during the period 1st July, 1948 to 30th June, 1949:—

Number of calves vaccinated
Number of calves successful
Number of calves lymph rejected
Amount of lymph obtained from 300 calves
Average quantity per successful calf
Average number of tubes per successful calf
Average value per successful calf at 2d.
per tube
Total number of tubes manufactured
during year ended 30th June, 1949 (calf
lymph)
Number of tubes issued during the above
period
Value of lymph manufactured at 2s. per tube (calf lymph)
Value of lymph issued free at 2d. per tube
Number of tubes (approximate) on hand
at the end of June, 1949 (calf lymph).
Revenue received by sales outside the
Union

320. 300.

151,090 c.c. 503 c.c.

-INT

20,120.

£167. 13s. 4d.

6,043,600.

6,656,973.

£50,363. 6s. 8d. £48,084. 15s. 8d.

1,386,400.

£7,253. 13s. 10d.

#### Table V (4) (continued).—Government Vaccine Institute, Rosebank, Cape.

Work carried out during the period 1st July, 1949 to 30th June, 1950:—

Number of calves vaccinated	300.
Number of calves successful	293.
Number of calves lymph rejected	7.
Amount of lymph obtained from 293	
calves	164,610 c.c.
Average quantity per successful calf	561 c.c.
Average number of tubes per successfull	1000
calf	22,440.
Average value per successful calf at 2d. per	, , , , , , ,
tube	£187.
Total number of tubes manufactured	
during the year ending 30th June, 1950.	6,584,400.
Number of tubes issued during the above	,- ,-
period	4,043,585.
Value of lymph manufactured at 2d. per	, ,
tube	£54,870.
Value of lymph issued free at 2d. per tube	£27,726 10s. 2d
Number of tubes (approximate) on hand	,
at the end of June, 1950	3,427,000.
Revenue received by sales outside the	
Union	£5,770. 9s. 8d.

## TABLE V (4) (continued).—GOVERNMENT VACCINE INSTITUTE, ROSEBANK, CAPE. Work carried out during the period 1st July, 1950, to

30th June, 1951.

		_
Number of calves vaccinated  Number of calves successful	226. 214.	
Number of calves lymph rejected	12.	
Amount of lumph obtained from 214	1	
calves	149,755 c.c.	
Average quantity per successful calf  Average number of tubes per successful	699 c.c.	
calf  Average value per successful calf at 2d. per	27,960.	
tube	£233.	
Total number of tubes manufactured during the year ending 30th June, 1951  Number of tubes issued during the above	5,990,200.	
period	4,539,353.	
tube	£49,918. 6s.	
Value of lymph issued free at 2d. per tube	£29,562. 4s.	2d.
Number of tubes (approximate) on hand at the end of June, 1951	4,215,600.	
Revenue received by sales outside the Union	£8,106. 16s.	<b>0</b> d.

# TABLE V (4) (continued).—GOVERNMENT VACCINE INSTITUTE, ROSEBANK, CAPE. Annual Report on work carried out during the period 1st July, 1951 to 31st December, 1951:—

Number of calves vaccinated  Number of calves successful  Number of calves lymph rejected	114. 112. 2.
Amount of lymph obtained from 112 calves	78,619 c.c. 689 c.c.
calf	27,560. £229. 13s. 4d.
Number of sheep vaccinated  Amount of lymph obtained from 35 sheep.  Average quantity per sheep	35. 13,158 c.c. 376 c.c.
Average number of tubes per sheep  Average value per sheep at 2d. per tube  Total number of tubes manufactured	15,040. £125. 6s. 8d.
during six months ending 31st December, 1951	3,671,100.
period  Value of <i>all</i> lymph manufactured at 2d. per tube	1,582,025. £30,592. 10s. 0d
Value of lymph issued free at 2d. per tube  Number of tubes (approximate) on hand	£10,529. 8s. 8d.
at the end of December, 1951  Revenue received by sales outside the Union	5,252,080. £2,648. 13s. 10d.

#### TABLE V (4) (continued).—GOVERNMENT VACCINE INSTITUTE, ROSEBANK, CAPE PROVINCE.

Annual Report on work carried out during the period 1st January, 1952 to 31st December, 1952.:—

Number of calves vaccinated	255.
Number of calves successful	254.
Number of calves lymph rejected	1.
Amount of lymph obtained from 254	**
calves	155,015 c.c.
Average quantity per successful calf	610 c.c.
Average number of tubes per successful	010 0.0.
calf	25,315.
Average value per successful calf at 2d. per	20,013.
tube	£215. 19s. 2d.
Total number of tubes manufactured	W210. 170. 2d.
during the year ending 31st December,	
1952	6,430,600.
Number of tubes issued during the above	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
period	2,920,151.
Value of all lymph manufactured at 2d. per	_,-,,
tube	£53,588. 6s. 8d.
Value of lymph issued free at 2d. per tube	£19,948. 8s. 6d.
Number of tubes (approximate) on hand	,
at end of December, 1952	9,676,680.
Revenue received by sales outside the	
Union	£4,516. 16s. 0d.
Small Animals.	
Guinea pigs supplied during the year to	
Bacteriological Laboratory, Cape Town	540.
Guinea pigs on hand 31st December, 1952	560.
Rabbits utilized for seed lymph	44.
Fowls on hand 31st December, 1952	36.
ZOTILO OII IMIIM DIOCEDOMINOTI, 1902	50.

### Table V (5).—Government Vaccine Institute, Rosebank, Cape.

Lymph issued free in the Union from 1st July 1947, to 30th June, 1948:—

Month.	Cape.	Transvaal.	Natal.	Orange Free State.
1947— July August September October November December	274,997	159,975	72,908	6,203
	145,107	162,296	250,679	6,212
	149,257	135,786	200,756	9,662
	25,009	109,954	120,804	4,488
	62,624	114,114	20,804	10,548
	14,131	126,439	778	5,772
1948— January February March April May June.	27,216	84,429	2,279	7,578
	109,781	134,657	7,779	4,902
	106,723	127,253	16,079	4,337
	105,591	154,111	32,098	16,645
	114,952	234,440	125,104	13,896
	94,320	160,945	75,779	24,456
Total	1,229,708	1,704,399	925,847	114,699

#### Table V (5) (continued).—Government Vaccine Institute, Rosebank

Lymph issued free in the Union from 1st July, 1948, to 30th June, 1949:—

Month.	Cape.	Transvaal.	Natal.	Orange Free State.
1948— July August September October November	127,242	173,382	128,410	7,366
	109,522	324,108	76,654	8,305
	76,283	207,887	116,301	6,576
	79,226	193,497	32,864	8,578
	101,666	416,703	14,454	20,661
December  1949— January	128,253 41,568	263,876	48,006 14,794	5,182
February	18,292	179,590	10,471	4,850
March	80,897	305,180	18,709	5,761
April	82,171	251,909	20,764	10,953
May June Total	139,947	600,046	54,012	21,954
	95,501	668,406	218,690	31,830
	1,080,568	3,800,808	754,129	135,269

TABLE V (5) (continued).—GOVERNMENT VACCINE INSTITUTE, ROSEBANK.

Lymph issued free in the Union from 1st July, 1949 to 30th June, 1950:—

Month.	Cape.	Transvaal.	Natal.	Orange Free State.
0.40				
1949—	27,855	185,576	109,024	9,155
July		305,804	173,304	3.042
August	27,050	172,835	40,019	4,971
September	31,205	193,988	30,036	4,375
October	52,417	115,909	49	3,463
November	67,298		6,048	5,010
December	13,893	103,522	0,040	3,010
1050		'		
1950—	49,501	152,606	39,048	10,512
January		72,372	54	13,074
February	49,754 111,529	143,886	29,561	3,117
March	100,120	127,178	10,027	9,166
April		123,099	40,002	7,019
May	92,065			21,482
June	71,941	344,208	20,012	21,402
Total	694,628	2,040,983	497,184	94,386

Table V (5) (continued).—Government Vaccine Institute, Rosebank, Cape.

Lymph issued free in the Union from 1st July, 1950 to 30th June, 1951.

Month.	Cape.	Transvaal.	Natal.	Orange Free State.
950—				
July	73,760	319,657	21,543	16,740
August	78,981	211,953	21,554	15,714
September	121,256	145,562	43,088	18,444
October	100,852	150,890	47	15,649
November	61,853	166,336	21,555	13,901
December	51,307	117,294	43,073	7,738
951—				
January	81,813	125,570	97	11,953
February	110,100	108,874	21,554	86,264
March	56,613	180,734	21,549	6,491
April	71,716	167,340	10,049	6,184
May	61,322	136,002	40,049	28,301
June	67,017	247,345	40,073	21,708
Totals	936,590	2,077,557	284,231	249,087

Table V (5) (continued).—Government Vaccine Institute, Rosebank, Cape.

Lymph issued free in the Union, from 1st July, 1951, to 31st December, 1951.

Month.	Cape.	Transvaal.	Natal.	Orange Free State.	Monthly Total.
1951— July August September October November December	66,227 60,451 54,573 51,650 52,161 30,332	194,090 138,480 48,500 78,000 117,100 102,850	85,025 6,049 36,000 2,000 15,000 19,500	10,010 10,334 53,000 4,200 7,250 750	355,352 215,314 192,073 135,850 191,511 153,432
Totals	315,394	679,020	163,574	85,544	1,243,532

### Table V (5) (continued).—Government Vaccine Institute, Rosebank, Cape.

Lymph issued free in the Union from 1st January, 1952 to 31st December, 1952.

Month.	Cape.	Transvaal.	Natal.	Orange Free State.	Monthly Total.
January February March April May June July August September October November December	27,678 24,899 32,997 12,964 33,848 63,816 46,531 17,710 74,798 49,220 64,479 41,310	72,150 120,650 96,600 95,900 137,300 219,800 129,600 208,600 97,000 151,800 80,100 96,600	1,000 13,010 15,000 15,000 15,000 45,000 45,000 15,000 15,000 15,000 254,010	3,250 6,500 4,500 6,700 25,900 36,000 14,900 5,000 8,900 10,650 1,250	104,078 165,059 149,097 130,564 212,048 364,616 236,031 291,210 191,798 224,920 170,229 154,160 2,393,810

TABLE V (6).—GOVERNMENT VACCINE INSTITUTE, ROSE-BANK, CAPE.

Sales outside the Union from 1st January, 1952, to 31st December, 1952.:-

Month.	Single	Amps. 250	Amps. 100	Amps. 50
	Dose	Dose	Dose	Dose
	Tubes @	@ 32s.	@ 14s.	@ 7s. 6d.
	2d. each.	each.	each.	each.
January February March April May June July August September October November December	49,641 54,777 46,879 50,232 49,141 23,017 32,269 28,213 44,390 57,632 48,156 41,994		20 — — — — — — — — — — — — — —	45 20 20 25 20 20 25 20 20 25 46 25

Total issued for year:-

Cape	490,250		
Transvaal	1,506,100		
Natal	254,010		
Orange Free State	143,450		
Outside Union	526,341	@	2d.
	311	@	7s. 6d.
	20	@	14s.
-			
Total	2,920,151	sin	gle tubes.
	20	@	100 amps.
	311	(a).	50 amps.

			MATERNA CHILD H	AL AND EALTH.		]	Preventive.				Infectious	S DISEASE.		VENEREAL	DISEASE.
Centre.	Total Atten- dances.	Domici- liary.	Total Atten- dances.	Ante- natal.	Vaccina- tion.	Diphtheria.	Combined Whooping Cough and Diphtheria.	T.A.B.	Total Cases.	Tuber- culosis.	Diphtheria.	Typhoid.	Polio- myelitis.	Syphilis.	Gono- rrhoea.
			·		,		NAT	TAL REGIO	DN.						
*Institute of Family and Community Health Botha's Hill Gcilima Ixopo †Nottingham Road Polela Tongaat.	206,202 18,336 87,892 17,301 — 14,155	102,261 640 9,399 — — 8,438	27,508 3,876 32,403 13,301 — 4,153	1,778 323 1,312 2,201 — 215	6,076 — 52 270 — — 177	7,239 — 2,604 — 1,407	768 — 493 142 — — 412	9,236	1,760 9 175 — — — — 20	187 8 140 — — — 10	1	- 1 7 - - -		288 92 1,220 51 — 63	213 30 3 5 —
							CA	PE REGIO	oN.						
Cradock. George. Gordonia. Grassy Park Knysna. Mossel Bay. Stellenbosch. Walmer.	31,506 31,777 	908 1,697 — 6,618 — 2,557 1,569 1,012	3,079 4,256 — 2,719 — 4,790 4,754 2,741	545 462 — 245 — 1,536 346 397	253 455 — 307 — 217 180 182	237 - 50 11 47	72 115 — 67 — 169 154 104		138 166 — 114 — 96 214 682	126 94 — 50 — 92 90 117	$\begin{bmatrix} -8 \\ -5 \\ -2 \\ 3 \\ 2 \end{bmatrix}$	2 - - - 2 2		144 301 — 62 — 275 176 2,252	86 -4 -2 -48 153
							CAPE E	ASTERN R	REGION.						
Adelaide Fort Beaufort Grahamstown Sandflats Umtata Zwelitsha	12,803 16,123 65,649 14,407 47,299 31,345	1,052 7,837 4,615 1,707 10,685 10,177	3,963 7,099 20,537 591 23,201 13,208	128 391 483 226 6,405 555	400 8 1,772 102	- 35 781 - 905 4	34 411 23 1,197 188	96 -79 2,357 348	19 23 329 161 433 260	19 20 153 42 116 59	- 2 - 1 - 1		- <sub>1</sub>	432 222 748 118 756 181	14 16 — — — 177 —
						SC	UTHERN	TRANSVA	AL REGIO	N.					
Bloemhof Evaton Lady Selborne Randfontein	4,664 22,989 79,059 31,498	6,724 1,760 2,012	162 3,989 6,236 5,639	111 380 3,806 670	890 572 239	347 1,182 1,128	130 137 73 96	113 1,719	136 876	6 13 49 31	10 32 15			389 446 1,266 988	54 126
						NO	RTHERN	TRANSVA	AL REGIO	N.					
Bosbokrand	29,381	_	7,333	829	172	_	76	896	194	21	_	4	_	606	58
						0	RANGE F	REE STAT	E REGION	r.					
Bethlehem	20,686	_	6,682	88	83	_	56	94	247	20	2	2	_	395	_

<sup>\*</sup> Institute of Family and Community Health includes the following health centres:—
Clairwood, Newlands, Springfield.
† Figures not available see text page 21.

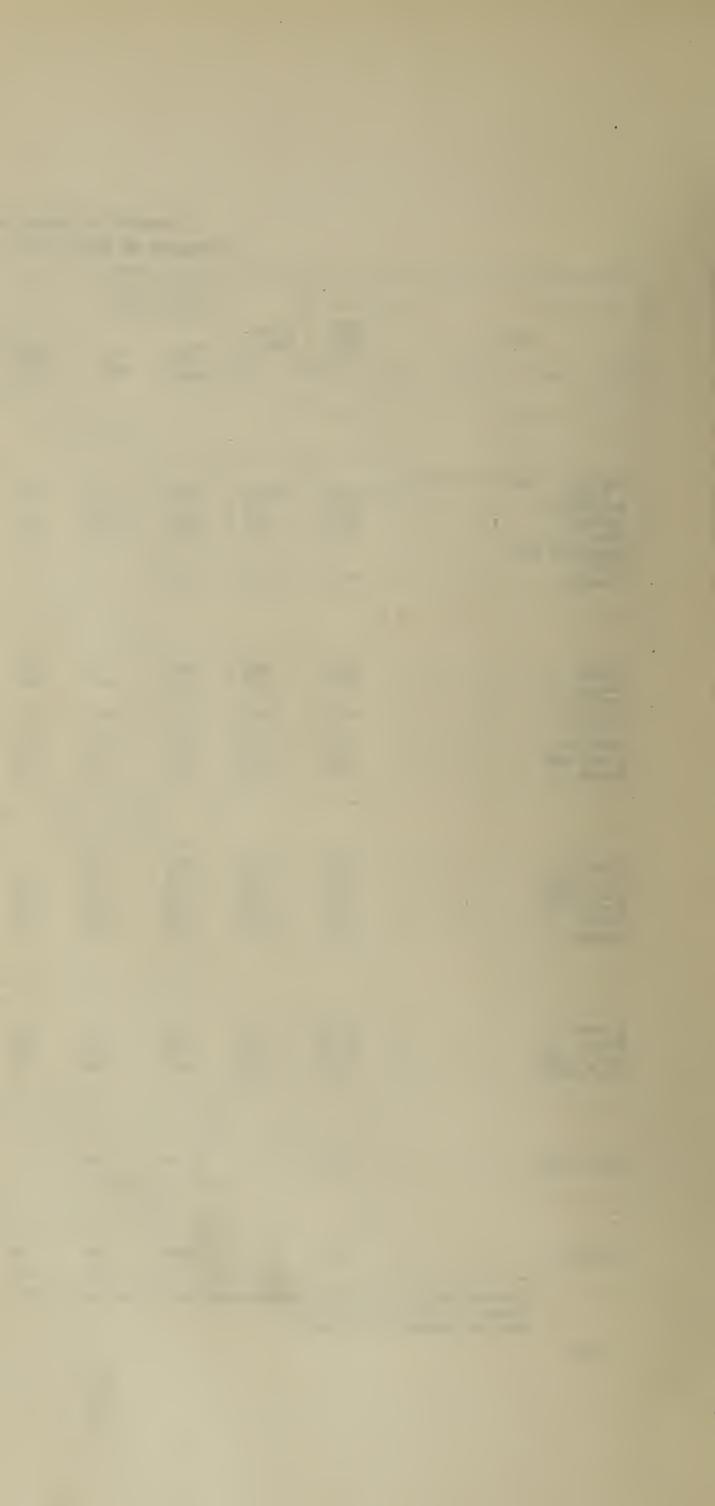


Table VII (1).—Foods, Drugs and Disinfectants Act No. 13 of 1929. Samples taken for Examination or Analysis and the Results, 1947–52.

	ANALISIS AND	THE RESULTS,	1947–32.		
		Period 1st J	fuly, 1947 то 3 <b>0</b> тг	H JUNE, 1948.	
Place.	Total taken.	Number Analysed or Examined.	Number found Adulterated or Incorrectly or falsely described.	Prosecutions.	Convictions.
Ports of Union	1,108 177 14	1,108 177 14	81 28	52 7	11 7
Transvaal Orange Free State	3,266 65	3,266 65	500 11	124	116 2
Total	4,630	4,630	620	186	136
		Period 1st J	OLY, 1948 TO 30TH	H JUNE, 1949.	
Place.	Total taken.	Number Analysed or Examined.	Number found Adulterated or Incorrectly or falsely described.	Prosecutions.	Convictions.
Ports of Union. Cape. Natal. Transvaal. Orange Free State.	2,247 36 106 4,533 21	2,247 36 106 4,533 21	125 8 4 733 3	75 8 \$2 141 3	62 5 2 130 3
Total	6,943	6,943	873	229	202
		Period 1st J	ULY, 1949 то 30тн	H JUNE, 1950.	3
Place.	Total taken.	Number Analysed or Examined.	Number found Adulterated or Incorrectly or falsely described.	Prosecutions.	Convictions.
Ports of Union Cape Natal. Transvaal Orange Free State.	1,518 47 36 3,299	1 ,518 47 36 3,299	37 8 1,070	14 6 1 101	14 6 1 101
Total	4,900	4,900	1,116	122	122
		PERIOD 1ST JUL	.у, 1950 то 31sт Г	DECEMBER, 1951.	
Place.	Total taken.	Number Analysed or Examined.	Number found Adulterated or Incorrectly or falsely described.	Prosecutions.	Convictions.
Ports of Union. Cape. Natal. Transvaal. Orange Free State.	1,435 1,918 153 5,732 170	1,435 1,918 153 5,732 170	37 166 10 726 9	28 57 9 108 6	17 40 3 95 4
Total	9,408	9,408	948	208	159
		PERIOD 1ST JANUA	ARY, 1952 TO 31ST	DECEMBER, 1952.	
- Place.	Total taken.	Number Analysed or Examined.	Number found Adulterated or Incorrectly or falsely described.	Prosecutions.	Convictions.
Ports of Union Cape. Natal. Transvaal.	1,297 38 140 3,915	1,297 38 140 3,915	76 2 10	48 — 5	405
Orange Free State	3,915	3,915	941	744	321
Total	5,390	5,390	1,029	797	366

Table VII (2).—Medical Dental and Pharmacy Act, (Act No. 13 of 1928).

Prosecutions and Convictions under Laws relating to Habit-forming Drugs during the Period Ended At Date shown.

				DATE SE							
Period	Descions	Euro	PEAN.	Na	TIVE.	ASIA	TIC.		HER URED.	To	TAL.
Ended.	Province.	Prose- cutions.	Con- victions.	Prose- cutions.	Con- victions.	Prose- cutions.	Con- victions.	Prose- cutions.	Con- victions.	Prose- cutions.	Con- victions.
30/6/48	Cape	56 32 104 8	50 32 90 6	1,229 3,052 5,083 493	1,143 2,951 4,866 472	17 173 19	14 166 17 —	2,085 111 462 34	2,018 107 431 32	3,387 3,368 5,668 535	3,225 3,256 5,404 510
	Union	200	178	9,857	9,432	209	197	2,692	2,588	12,958	12,395
30/6/49	Cape	63 36 111 7	57 36 103 7	1,583 3,408 6,403 673	1,470 3,304 6,092 642	10 250 31 2	10 232 20 2	2,399 155 483 36	2,348 149 453 32	4,055 3,849 7,028 718	3,885 3,721 6,668 683
	Union	217	203	12,067	11,508	293	264	3,073	2,982	15,650	14,957
30/6/50	Cape	76 66 187 27	71 64 167 23	1,570 3,212 6,918 910	1,432 3,105 6,611 858	13 385 23	12 368 21	2,862 212 546 48	2,764 201 518 47	4,521 3,875 7,674 985	4,279 3,738 7,317 928
	Union	356	325	12,610	12,006	421	401	3,668	3,530	17,055	16,262
30/6/51	Cape	76 73 167 13	69 65 145 12	1,703 3,724 6,133 837	1,561 3,606 5,834 800	10 408 36 3	9 395 33 3	2,885 210 483 27	2,819 200 462 26	4,674 4,415 6,819 880	4,458 4,266 6,474 841
	Union	329	291	12,397	11,801	457	440	3,605	3,507	16,788	16,039
6 Months 1/7/51- 31/12/51	Cape	32 46 82 5	26 44 73 5	821 1,479 3,644 404 6,348	768 1,442 3,493 . 382	12 229 14 —	12 224 14 — 250	1,618 121 291 12 2,042	1,584 119 278 12 1,993	2,483 1,875 4,031 421 8,810	2,390 1,829 3,858 399
											-
31/12/52	CAPE— Dagga Other habit-forming	90	83	1,737	1,636	12	12	2,662	2,592	4,501	4,323
	drugs NATAL—	-	-	busine .	_	1	1			1	1
	DaggaOther habit-forming	82	76	3,841	3,758	522	497	245	240	4,690	4,571
	drugs Transvaal—					2	2			2	2
	Dagga Other habit-forming drugs	181	164	7,873	7,498	14	12	574	551	8,642	8,225
	Orange Free State— Dagga	15	13	909	861			48	45	972	4 919
	Other habit-forming drugs		-	_	_	-				-	-
	UNION— Dagga Other habit-forming drugs	368	336	14,360	13,753	548	521	3,529	3,428	18,805	18,038

TABLE VII (3).—LICENCES AND PERMITS ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDING 30TH JUNE, 1948.

	I	IMPORT LICENCES.	ENCES.		MANU	MANUFACTURING LICENCES.	G LICENCI	es.	Вгоор	BLOOD PROCESSING	ING LICENCES.	CES.	R	RESEARCH LICENCES.	JICENCES.			VITAMIN	Vitamin Permits.	
	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.
Vaccines	£4 \$2 \$4 \$2 \$4 \$4 \$5 \$4 \$5 \$4 \$5 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6	-	8-  -	26 88 1 2 2 4 4 5 6 6 1 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	222 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			262000				[2] [1] [1] [1]								31   1   1   1   1   1   1   1   1   1

TABLE VII (3) (continued).—LICENCES AND PERMITS ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS YEAR ENDING 30TH JUNE, 1949.

	Total.	
PERMITS.	Can- celled.	
VITAMIN PERMITS.	Issued.	
	In Force.	
	Total.	
LICENCES	Can- celled.	111111111111111
RESEARCH LICENCES.	Issued.	111111111111111111111111111111111111111
	In Force.	
NCES.	Total.	
BLOOD PROCESSING LICENCES.	Can- celled.	
D PROCES	Issued.	
BLOO	In Force.	18
ICES.	Total.	86229
ING LICEN	Can- celled.	
MANUFACTURING LICENCES.	Issued.	
Mai	In Force.	262 20 20 20 20 20 20 20 20 20 20 20 20 20
	Total.	E4 & 9 & 4 & 4 & 9 & 8 & 6 & 4 & 8 & 9 & 13 & 13 & 13 & 13 & 14 & 15 & 15 & 15 & 15 & 15 & 15 & 15
JCENCES.	Can- celled.	
IMPORT LICENCES.	Issued.	-   -  2- 6-
	In Force.	21 m m m m m m m m m m m m m m m m m m m
Product.		Vaccines Sera, etc Toxins and venoms Toxoids and antigens Antitoxins Tuberculins Arsphenamines Insulins Pituitary extracts Surgical ligatures and sutures Progesterones Androsterones Antibiotics Vitamins Antivenines General

TABLE VII (3) (continued.—LICENCES AND PERMITS ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDING 30TH JUNE, 1950.

Product.		IMPORT LICENCES.	ICENCES.		Man	UFACTURIN	MANUFACTURING LICENCES.	ES.	Вгоор	Processi	BLOOD PROCESSING LICENCES.	ES.	2	RESEARCH LICENCES.	JICENCES.		>	VITAMIN PERMITS.	ERMITS.	
	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.	In Force.	Issued.	Can- celled.	Total.
Vaccines	£48944986 751   1375			41 00 00 00 00 00 00 00 00 00 00 00 00 00	82000     1   1000044			252	2			2								

TABLE VII (3) (continued).—LICENCES AND PERMITS ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDING 30TH JUNE, 1951.

	Total.	
VITAMIN PERMITS.	Can- celled.	
VITAMIN	Issued.	
	In Force.	
3.	Total.	
RESEARCH LICENCES.	Can- celled.	
RESEARCH	Issued.	7
	In Force.	
LICENCES.	Total.	~
11	Can- celled.	111111111111111
BLOOD PROCESSING	Issued.	m
BLOO	In Force.	<b>  ^                                  </b>
VCES.	Total.	962010
ING LICEN	Can- celled.	
Manufacturing Licences.	Issued.	-111111111111
Mai	In Force.	65 22 22 24 1       6 25 14 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
	Total.	41 8 62 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
JICENCES.	Can- celled.	126   144-66
IMPORT LICENCES.	Issued.	2       & L & L & L & L & L & L & L & L &
	In Force.	45 cc
Product.		Vaccines. Sera, etc. Toxins and venoms. Toxoids and antigens. Antitoxins. Tuberculins. Arsphenamines. Insulins. Pituitary extracts. Surgical ligatures and sutures. Oestrogens. Progesterones. Antibiotics. Vitamins. Antivenines.

#### TABLE VII (3) (continued).—THERAPEUTIC SUBSTANCES REGULATIONS.

Table showing details of licences and permits issued and valid for the period July 1st, 1951 to December 31st, 1951:—

Import Licences.  Manufacturing Licences.  Blood Processing Licences.  Research Licences.  Vitamin Permits.	138 5 12	No new licences issued.  No new licences issued.	
---	----------------	--	--

#### TABLE VII (3) (continued).—LICENCES ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS.

	Import Licences.	Manufacturing Licences.	Vitamin Permits.	Research Licences.	Blood Processing Licences.
Number of Licences— in force, 1/1/52 issued cancelled	65 7 8	134 13 1	42 1 1	12	5 1
in force 31/12/52	64	146	42 .	12	6

## Table VII (3) (continued).—Details of Manufacturing Licences in Force, 31st December, 1952.

Antitoxin and sera	38
Toxins, antigens and vaccines	83
Vitamins	5
Antibiotics	8
Androgen and oestrogens	1
Surgical catgut	î
Insulin	1
Тотац	146

#### TABLE VII (4).

Examinations carried out under the Therapeutic Substances Regulations for the year ending 30th June, 1948:—

Product.	Manu- factured in the Union.	Imported.	Number Unsatis- factory.
Bacterial vaccines	_	_	_
Schick test toxin	_		
Diphtheria prophylactic		_	
Diphtheria antitoxin	_	_	` —
Tetanus antitoxin		_	_
TuberculinArsphenamine and deriva-			_
tives	_		
Insulin		_	_
Pituitary extracts Sterilised ligatures and		_	_
sutures	_		_
Sex hormones	_	- 46	_
Vitamins and preparations	_		
Antibiotics		6	
Disinfectants	22		_
Others			
Totals	22	6	

#### TABLE VII (4) (continued.)

Examinations carried out under the Therapeutic Substances Regulations for the year ending 30th June, 1949.

Product.	Manu- factured in the Union.	Imported.	Number Unsatis- factory.
Bacterial vaccines. Schick test toxins. Diphtheria prophylactic Diphtheria antitoxin. Tetanus antitoxin. Tuberculin. Arsphenamine and derivatives. Insulin. Pituitary extract. Sterilised ligatures and sutures Sex hormones. Vitamins and preparations. Antibiotics. Disinfectants.		2 7 1 4 —	1 1
Others	19	25	3

TABLE VII (4) (continued).

Examinations carried out under the Therapeutic Substances Regulations for the year ending 30th June, 1950:—

Product.	Manu- factured in the Union.	Imported.	Number Unsatis- factory.
Vaccines	2		
Schick test toxins			
Diphtheria prophylactic			
Diphtheria antitoxin			
Tetanus antitoxin			
Tuberculin			
Arsphenamine and deriva-			
tives		11	
Insulin	6	4	
Pituitary Extracts	1	2	2
Sterilised ligatures and sutures			
Sex hormones			
Vitamins and preparations			
Antibiotics		12	3
Disinfectants	5		<b>—</b>
Others		_	-
TOTALS	14	29	5

Because of lack of trained personnel work of the above nature for the period 1st July, 1950 to 31st December, 1952 had to be drastically curtailed and essential investigations were carried out by the South African Institute for Medical Research, Johannesburg.

TABLE VII (5).—NARCOTIC DRUGS IMPORTED INTO THE UNION OF SOUTH AFRICA, 1948-52 (IN KILOGRAMS).

	Methor- phinan.	23 (16)	1	1	1	1	0.061
	Phi				. 62	50	
	Ami- done.	22(15)	-	1	0.129	2.520	1.537
	Phena- doxone.	21 (14)	1	1	0.032	90.0	1
	Papa- verine.	20 (13)	2.268	7.037	1	1	1
	Pethi- dine.	18 (11)	4.985   14.758	97.557	68.743	183 - 447	149.553
	Dionine.	17 (10)	4.985	6.872	9.661	18.301   183.447	12.040   149.553
	Codeine. Dionine.	15 (8)   16 (9)   17 (10)   18 (11)   20 (13)   21 (14)   22(15)	188.778	0.007 111.508	278.047	379.479	311.389
	Acedi-	15 (8)		0.007		1	
	Dilau- dide.	(6) 14 (7)	0.024	0.003	0.117	0.012	
	Diodide.	13	0.044	0.001	0.126	0.105	1
	Euco-	12 (5)	1	1	1	1	1
	Heroin.   Crude   Cocaine.   Euco-caine.   dal.	11 (4)	17.296	10-855	869.8	17.581	22.206
	Crude Co- caine.	10 (3)		1	1	1	1
	Heroin.	8 (1)   9 (2)   10 (3)   11 (4)   12 (5)	23.761	8.877	15.496	28.530	I
	Mor- phine.	8 (1)	22.131	26.354	33.001	40 · 599	36.367
	Indian Hemp (R)	7		1	1	1	1
	Indian Hemp Galeni- cals.	9	38.101	21.273	23.020	15.875	14.288
	Indian	S		1	1	1	1
	Coca	4	1	1	1	1	1
	Opium- tinctures Coca Indian Hemp Hemp Hemp and Leaves Hemp Galeni- Extracts. (R)	С.	30.412	84.918	71.728	45.645	59.346
	Medi- cinal Opium.	2	(1)		118.163	328.406	98.838
	Raw Opium.	1	381.269 45.81	385.848 102.059	487.622 118.163	352.590   328.406	302.750
	Drug.	International Code No	1948	1949	1950	1951	1952

